

## EXECUTIVE SUMMARY

- Madhav Institute of Technology and Science then known as **Madhav Engineering College** was established in 1957 by His Highness **Late Sir Jiwaji Rao Scindia**, Maharaja, Erstwhile state of Gwalior with the prime objective of providing Technical Education at undergraduate and post graduate levels along with conducting research activities. The foundation stone of the Institute was laid by **Late Dr. Rajendra Prasad**, the then President of India on 20th October, 1956 and the building was inaugurated on 11th December, 1964 by **Late Dr. S. Radhakrishnan**, the then President of India.
- Later, on 30<sup>th</sup> June 2008, **Smt Pratibha Devisingh Patil**, the then President of India, presided over the **Golden Jubilee Celebrations** of the institute.
- The Institute started initially with B.E. Courses in Civil, Mechanical and Electrical Engineering. Later on Post Graduate and Ph.D. Course in applied Sciences were introduced 1967. The B.E. in discipline Electronics Engineering was started in 1981. Undergraduate course in Architecture was introduced in 1984. The Institute took the lead in the region to start of Post Graduate course in Computer application (M.C.A.) in 1986.
- The Institute offered the Post graduate Course in Civil Engineering with specialization in Construction Technology and Management in 1987, which was perhaps first in India. Post Graduation in Electronics and Electrical Engineering was started in 1995. The B.E. in Computer Science and Engineering & Chemical Engineering were offered first in 1994 and 1995 respectively and the discipline of Information Technology was started in 2000.
- Post graduate course in Environment Engineering, Geo Informatics, Chemical Engineering, Cyber Security, Information Technology and BE in Electronics and Telecommunication Engineering and BE in Automobile Engineering are the latest additions. The Institute also offers Ph.D. programmes in various disciplines of Engineering, Technology and Science.
- During this 59 year long phenomenal journey, MITS has never looked back and has constantly strived to achieve new heights. With the encouragement and support from our management, the institute has emerged as a leading technical institution of the region. The MITS family has persistently tried to maintain very high academic standards, superior placements, strict discipline and an excellent work culture.

- The institute is proud to be one among the 189 institutions of 22 states and union territories of the nation which are selected by the MHRD under TEQIP-II. Only five institutes of Madhya Pradesh have this privilege. The funding received under this scheme has strengthened the academic fabric of the institute, through short-term training programs, expert lectures, conferences/seminars and addition of latest equipment and software to the various laboratories.
- The institute has a sprawling campus spread in 45 acres on Race Course Road, Gwalior. The inside of the campus resembles a well planned city with gardens, lawns and clean wide roads. The campus has its own water supply and backup electricity supply. The total built up area is around 35000 sq. meter with 26 lecture halls and tutorial rooms, conference hall, drawing halls, central computer center, training and placement cell, workshop, boys and girls hostels, guest house, medical dispensary, staff quarters, sports complex and Entrepreneurship and Development Cell.
- The overall MITS campus is divided into two main zones: Student & Faculty Residential Zone. The student residential zone is divided into two main sectors --one for men's hostels and another for women's hostel. There are, in all, 5 hostels (3 for men and 2 for women). Each hostel has a capacity of around 112 students though some hostels can house 200 students. New hostel buildings with latest facilities are under construction to accommodate more students. Each hostel has its own mess, a table tennis room, a common room where residents can watch television and read magazine and newspapers and a visiting room where residents can receive their guests.
- A sense of social responsibility is being inculcated in our students through various activities of the National Service Scheme (NSS). Students are encouraged to teach and help the under privileged children from nearby areas. To increase awareness on health issues free or subsidized medical camps, blood donation camps etc are routinely organized.
- The Institute has advanced infrastructure for teaching learning process. The students are groomed and trained to face the world outside the campus through various student chapters, personality development courses, student activities and numerous technical competitions.
- The institute is going to celebrate its diamond jubilee this year. Recently, the institute was awarded autonomy by the University Grants Commission (UGC). The institute is

committed to provide quality technical education and strives to fulfil the aspirations of all stakeholders. The syllabi are continuously updated in consultation with experts from industry, academia, alumni and students, taking advantage of the academic autonomy from the affiliating university since year 2002. The senior faculty members are known in their respective research fields at national/international levels due to their high quality research papers, their presence on the programme committees of International Conferences, research collaboration with institutes of repute, being on the expert panels of Central Agencies like the NBA, UPSC etc. The faculty has received research and development grants from all major central funding agencies. The institute promotes and sponsors faculty members for attending academic events, faculty development programmes, seminars, workshops etc. for updating their technical knowledge and also to adopt the best practices from different academic/research institutes. The UG and PG students are also encouraged by providing financial support to present their research papers anywhere in India.

- The institute successfully completed TEQIP-II and was appreciated for getting 'A' grade in six of the seven criterions. Recently the institute was identified for support under TEQIP-III.
- For the all round development of students there are 61 student clubs and 7 nationally/internationally recognized professional society chapters such as IEEE, IET, IETE, CSI, ISTE, SAE etc. These professional society chapters are very active and provide a national/international platform for the students to interact with peers, organize technical events, competitions and design workshops etc.
- The institute has recently launched its own MOODLE (Modular object oriented digital learning environment) to facilitate conduction of on-line learning and evaluation. The institute also plans to provide credit transfer facility to students through the SWAYAM (Study Web of Active learning by Young and Aspiring Minds) platform for giving full advantage of e-learning to students, permitting them to learn in their own time at their own pace.

# THE EXISTING INFRASTRUCTURE OF MITS CAMPUS

**AREA STATEMENT MIT S CAMPUS**

TOTAL AREA =90,000 SQ. M

EXISTING GROUND COVERAGE

APPROX. 14%=26600 sqm





## 1. Profile of the Affiliated/Constituent College

1. Name and Address of the College:

Name:	Madhav Institute of Technology and Science, Gwalior (M.P.)	
Address:	P.O. Residency , Race Course Road, Gola Ka Mandir, Gwalior	
City:	Pin: 474005	State: Madhya Pradesh
Website:	www.mitsgwalior.in	

2. For Communication:

Designation	Name	Telephone withSTDcode	Mobile	Fax	Email
Principal	Dr. R.K. Pandit	O: 0751-2409300 R: 0751-2665962	9926454902	0751-2664684	director@mitsgwalior.in drpanditrk@gmail.com
VicePrincipal	NA	O: R:			
Steering Committee Co-ordinator	NA	O: R:			

3. Status of the Institution: Affiliated College/ Constituent College

(Government Aided, UGC Autonomous Insitute Affiliated to Rajiv Gandhi  
Prodhयोगiki Vishwavidhyalaya, Bhopal)

4. Type of Institution:

a. By Gender

i. For Men

ii. For Women

iii. Co-education

b. By Shift

i. Regular

ii. Day

iii. Evening

5. It is a recognized minority institution?

Yes

No

If yes, specify the minority status (Religious/linguistic/anyother) and provide documentary evidence.

NA

6. Sources of funding: Government

Grant-in-aid

Self-financing

Anyother

√
√

7. A. Date of establishment of the college: 01 July 1957

b. University to which the college is affiliated/or which governs the college (If it is a constituent college)

Rajiv Gandhi Proudhyogiki Vishwavidyalaya, Bhopal (M.P.)

c. Details of UGC recognition:

**UGC Autonomous Institute for a period of six years w.e.f. 2017-18 to 2012-23 under the UGC scheme of Autonomous colleges No. 2-18(3)/ 2013 (AC) dated 16.03.2017**

Under Section	Date, Month & Year (dd-mm-yyyy) <b>*(Please See Annexure-I)</b>	Remarks If any)
i. 2(f)	09/10/2013	Letter no. F. No. 1-1/2012(CPP-I/C) and ammendment leter no F. No. 8-8/2012 c(CPP-I/c) ( Regarding affiliating university)
ii. 12(B)	09/10/2013	Letter no. F. No. 1-1/2012(CPP-I/C) and ammendment leter no F. No. 8-8/2012 c(CPP-I/c) ( Regarding affiliating university)

(Enclose **the Certificate of recognition u/s 2(f) and 12(B) of the UGC Act**)

D. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

UnderSection/ clause	Recognition/ Approval details Institution/Department Program <b>*(Please See Annexure-II)</b>	Day,Month andYear (dd-mm-yyyy)	Validity	Remarks
AICTE-Chapter 2	Engineering & Technology	*EOA f. No. Central/1- 3323956641/2017/E OA <b>Dated :10/04/2017</b>	One year	

AICTE-Chapter 2/ Council of Architecture	Architecture & Town Planning	*EOA f. No. Central/1- 3323956641/2017/E OA Dated :10/04/2017 COA Ref. CA/5/Academic- MP-02 27.05.2017	One year	
AICTE-Chapter 2	MCA	*EOA 10/04/2017 f. No. Central/1- 3323956641/2017/E OA	One year	

\* Extended period of approval from AICTE for academic year 2017-18, 18-19, 19-20, 20-21, 21-22, 22-23

(Enclose the recognition/approval letter)

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes  No

If yes, has the College applied for availing the autonomous status?

Yes  No

9. Is the college recognized

a. by UGC as a College with Potential for Excellence (CPE)?

Yes  No

If yes, date of recognition:.....NA.....(dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes  No

If yes, Name of the agency.....NA.....and

Date of recognition:.....NA.....(dd/mm/yyyy)

10. Location of the campus and area ins q.mts:

Location *	Urban
Campus area in sq. mts.	180813 sq. mts. (44.68 Acre)

Built up area in sq. mts.	34814 sq. mts.
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(\*Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

The facilities listed below are available in the campus. These facilities are of institute property solely.

- Auditorium/seminar complex with infrastructural facilities: Yes

The Institute has two seminar halls with seating capacity of 300 each. Each hall is equipped with e-station facility.

- Sports facilities

\* play ground :Yes

\* swimming pool :No

\* gymnasium :Yes

- Hostel

- \* Boys' hostel

i. Number of hostels 03

ii. Number of inmates 240

iii. Facilities (mention available facilities)

Bed, Table, Chair, Fan, Recreation hall with T.V. , Newspaper, playground, in-house laundry service, wifi connection, sanitary staff , hot water facilities and water purifiers

- \* Girls' hostel

i. Number of hostels 02

ii. Number of inmates 365

iii. Facilities (mention available facilities)

Bed, Table, Chair, Fan, Recreation hall with T.V. , Newspaper, playground, in-house laundry service, wifi connection, hot water facilities and water purifiers, security guard, sanitary staff

- \* Working women's hostel No

i. Number of inmates

ii. Facilities (mention available facilities)

- Residential facilities for teaching and non-teaching staff (give numbers

available – cadre wise)

For Teaching staff : 08

For Non- teaching : 06

• Cafeteria : Yes

• Health centre : Yes

First aid, Inpatient, Outpatient, Emergency care facility Ambulance

Health centre staff-

Qualified doctor Fulltime  Part-time

Qualified Nurse Fulltime  Part- time

- Facilities like banking, post office, book shops:
  - Union Bank of India, Branch MITS
  - ATM counter Union Bank of India
  - ATM counter IDBI
  - Books & stationery shop
  - Courier Office
- Transport facilities to cater to the needs of students and staff: **Yes**
- Animal house : **No (Not Applicable)**
- Biological waste disposal : **Yes.**

The biological waste material after sterilization is disposed off in pit. Also the Institute has full time sanitary inspector and sanitation staff.

- Generator or other facility for management/regulation of electricity and voltage

The institute has following facilities for management/regulation of electricity and voltage:

- 33 kV substation
- Generator: 03 Nos., 25 kVA, 125 kVA and 200kVA
- Inverters & UPS

- Solid waste management facility : **Yes.**

Dumping & removal is as per norms of Nagar Nigam Gwalior.

- Waste watermanagement : **Yes, through municipal drainage system**
- Waterharvesting : **Yes**

12. Details of Programmes offered by the college (Give data for current academic year)

Sl. No.	Program Level	Name of the Program/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
1	Under-Graduate	BE	4 Years	10+2	English	870	*1031
		B Arch	5 Years	10+2	English	40	*41
2	Post-Graduate	ME/MTech	2 Years	BE/ B. Tech.	English	294	156
		M. Arch		B. Arch.	English	18	18
		MCA	3Years	B. Sc. / B Tech. (IT,CSE)	English	60	39
3	Ph.D.	Ph.D.	-	ME/MTech	English	-	04

\* Including GOI seats

13. Does the college offer self-financed Programmes?

Yes  No

If yes, how many?

Presently, the Institute is offering following self financed courses:

- BE in Information Technology
- BE in Chemical Engineering
- BE in Biotechnology
- BE in Electronics and Telecommunications Engineering
- BE in Automobile Engineering
- ME in Environment Engineering
- MTech in Chemical Engineering
- MTech in Cyber Security
- MTech Information Technology

14. New Programmes introduced in the college during the last five years if any?

Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Number	06
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15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding Programmes. Similarly, do not list the departments offering common compulsory subjects for all the Programmes like English, regional languages etc.)

Faculty	Departments (eg. Physics, Botany, History etc.)	UG	PG	Research
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Science	Applied Science Department	√	-	-
Arts	-	-	-	-
Commerce	-	-	-	-
Any Other (Specify)	Engineering	√	√	√
	Architecture	√	√	√
	Computer Applications	-	√	√

16. Number of Programmes offered under (Programme and a degree course like BA, BSc, MA, M. Com...)

- a. annual system
- b. semester system
- c. trimester system

17. Number of Programmes with

- a. Choice Based Credit System
- b. Inter/Multidisciplinary Approach
- c. Any other (Grading System)

18. Does the college offer UG and/or PG Programmes in Teacher Education?

Yes  No

If yes,

- a. Year of Introduction of the Program(s).....NA...(dd/mm/yyyy)  
and number of batches that completed the Program

b. NCTE recognition details (if applicable)

Notification No.:..... NA .....Date: NA .....

Validity:..... NA .....

c. Is the institution opting for assessment and accreditation of Teacher Education Program separately?

Yes  No

19. Does the college offer UG or PG Program in Physical Education?

Yes  No

If yes,

- a. Year of Introduction of the Program(s).....NA .....(dd/mm/yyyy) and number of batches that completed the Program

b. NCTE recognition details (if applicable) NA  
 Notification No.: ..... NA ..... Date: ..... NA  
 .....(dd/mm/yyyy) Validity: ..... NA .....

c. Is the institution opting for assessment and accreditation of Physical Education Program separately?

Yes  No

20. Number of teaching and non-teaching positions in the Institution

Position	Teaching faculty						Non-Teaching Staff		Technical Staff	
	Professor		Associate Professor		Assistant Professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F				
Sanctioned by the UGC / University / State Government Recruited	12	4	10	4	34	6	61	16	57	8
Yet to recruit	7		22		28		Nil		Nil	
Sanctioned by the Management/ Society or other authorized Recruited	-	-	3	-	9	5	10	1	-	-
Yet to recruit	5		11		23		Nil		Nil	

\*M-Male \*F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
<b>Permanent teachers</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	11	3	8	4	11	5	42
M.Phil.	-	-	-	-	1	-	1
PG	1	1	5	-	30	6	43
UG					01		01

Temporary teachers							
Ph.D.	-	-	-	-	1	5	6
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	24	17	41
UG					04	07	11
Part Time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	4	1	5

22. Number of Visiting Faculty/Guest Faculty engaged with the College. 05

Teaching/Research Assistants: 02  
Resourse Persons from Industry: 22

23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	Year 1 (2016)		Year2(2015)		Year3 (2014)		Year4(2013)	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	188	45	159	57	132	47	128	56
ST	69	09	51	05	52	14	49	23
OBC	176	75	162	57	128	52	177	69
General	400	186	429	229	399	207	355	173
Others (NRI)	01	-	-	-	-	-	-	-

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same State where the college is located	3679	442	--	55	4121
Students from other states of India	194	23	--	--	217
NRI students	01	--	--	--	01
Foreign students	--	--	--	--	
<b>Total</b>					<b>4339</b>

25. Drop out rate in UG and PG (average of the last two batches)

UG 2%

PG 4%

26. Unit Cost of Education

*(Unit cost=total annual recurring expenditure (actual) divided by total number of students enrolled)*

(a) **component** including the salary  
Rs. 80,204.877

(b) **component** excluding the salary  
Rs. 32,997.14

27. Does the college offer any Program/s in distance education mode(DEP)?

Yes  No

If yes,

a) is it a registered centre for offering distance education Programmes of another University

Yes  No

b) Name of the University, which has granted such registration.

Indira Gandhi National Open University (IGNOU)

c) Number of Programmes offered

- MCA- 3 Years Program
- BCA- 3 Years Program
- CIT- Certificate Program in Information Technology

d) Programmes carry the recognition of the Distance Education Council.

Yes  No

28. Provide Teacher-student ratio for each of the Program/course offered- 1:15

29. Is the college applying for

Accreditation: Cycle1  Cycle2  Cycle3  Cycle4

Re-Assessment:

*(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)*

30. Date of accreditation \*(applicable for Cycle2, Cycle3, Cycle4 and re-assessment only) - NA

Cycle1:.....(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle2: .....(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle3:..... (dd/mm/yyyy) Accreditation Outcome/Result.....

***\*Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.***

31. Number of working days during the last academic year.

230 days

32. Number of teaching days during the last academic year

*(Teaching days means days on which lectures were engaged excluding the examination days)*

141 days

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC

27/12/2016(dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) .....NA.....(dd/mm/yyyy)

AQAR (ii) ..... NA.....(dd/mm/yyyy)

AQAR (iii)..... NA.....(dd/mm/yyyy)

AQAR (iv) ..... NA.....(dd/mm/yyyy)

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information) Nil.

## 2. Criteria-wise Inputs

### CRITERION I: CURRICULAR ASPECTS

#### 1.1 Curriculum Planning and Implementation

- 1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

#### **Vision of the Institute**

To create world class quality Engineers and Technocrats capable of providing leadership in all spheres of life and society

#### **Mission of the Institute**

- To provide quality education in technical and allied disciplines.
- To organize and arrange innovative courses in Engineering and Technology.
- To arrange vocational courses in the upcoming fields and innovative subjects to meet global advancement.
- To promote research in the fields of Technology and Science.

#### **Objectives**

- To provide the best possible education facilities for students and training for building their bright careers in Engineering and Technology.
- To ensure technological up-gradation of students to meet the need of industry by organizing seminars, expert lectures, workshops etc.
- To encourage faculty for undertaking research and also present/ publish research papers in national/international seminars, conferences and journals.
- To generate new knowledge by engaging in cutting- edge research for overall development of students & society.
- To inculcate understanding of professional and ethical responsibilities.
- To organize quality improvement Programmes for faculty members from reputed national or international engineering colleges and industries.
- To emphasize on value based education through multi-grade modern teaching methodologies and techniques.



- To invite leading industries or companies for campus placement.

The vision, mission and objectives of the Institution, are communicated to the students, teachers, staff and other stakeholders in following manner.

- By displaying the Vision, Mission and Objectives of Institution in the prospectus, Newsletter, on the institute website etc.
- By verbal communication in teacher- parent meeting.
- By displaying at department office/library, HoD Office and Training and Placement Office
- By reading vision and mission at the beginning of events conducted in the institute including orientation/induction program

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).**

Institution develops and deploys action plans for effective implementation in following manner-

- Academic calendar includes all the Academic, Curricular, Co-curricular and extension activities.
- Each Programme of the department is elaborated in terms of Programme Outcomes which are aligned with graduate attributes. Furthermore, Course Outcomes(CO'S) for every subject taught are formed by individual faculty members.
- Every faculty member prepares a teaching plan, showing month-wise topics to be taught. These plans depend upon the syllabus prescribed by the college and the number of lectures allotted. The topics to be covered, the time required, the content that would be covered over a period of one week, in a month, and in a semester is properly described in the teaching plan.
- Programme Education Objectives (PEO's) are formed in consultation with stakeholders : faculty members, alumni, parents, employers etc.
- Devising a mechanism to monitor teaching and other related activities from time to time.
- Performance of students in practical subjects is assessed by conducting quiz and viva voice.
- Seminar and vocational training are conducted for students.

## Sample of Academic Calendar:

## MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR

(A Govt. Aided UGC- Autonomous Institute affiliated to RGPV, Bhopal)

Website : [www.mitsgwalior.in](http://www.mitsgwalior.in)

Date : ~~09-11-2017~~ 20.7.17

### Academic Calendar for ODD Semester: July 2017 to Dec 2017

(II yr.to Final year BE,B.Arch,M.E./M.Tech, MCA& Ph.D)


- |     |  |   |  |
|-----|--|---|--|
| 1.  | Online Registration  | : | 11 <sup>th</sup> -23 <sup>rd</sup> July 2017   |
| 2.  | Submission of Hard copy of the Registration form to class coordinators (Mandatory) | : | 24 <sup>th</sup> - 26 <sup>th</sup> July 2017  |
| 3.  | Teaching Starts  | : | 24 <sup>th</sup> July 2017   |
| 4.  | Registration with late fee   | : | 24 <sup>th</sup> July to 26 <sup>th</sup> July 2017<br>(With late fee Rs. 100/- per day)<br>(After 26 <sup>th</sup> July 2017 registration only in exceptional cases with permission from Director & late fee of Rs. 2000/-) |
| 5.  | Mid Semester Exam – I & Quiz   | : | 30 <sup>th</sup> , 31 <sup>st</sup> Aug. – 1 <sup>st</sup> Sept. 2017<br>(Wed, Thur, Fri)  |
| 6.  | Mid Semester Exam – II & Quiz  | : | 11 <sup>th</sup> -13 <sup>th</sup> October, 2017<br>(Wed, Thurs, Fri)  |
| 7.  | Mid-Semester Break   | : | 16 <sup>th</sup> – 20 <sup>th</sup> October, 2017  |
| 8.  | Mid Semester Exam – III & Quiz (See note 3 below)                                  | : | 8 <sup>th</sup> -10 <sup>th</sup> November, 2017<br>(Wed., Thurs, Fri)   |
| 9.  | Teaching Ends  | : | 10 <sup>th</sup> November, 2017  |
| 10. | Online Exam form Submission  | : | 8 <sup>th</sup> November- 13 <sup>th</sup> November 2017   |
| 11. | Founder's Day  | : | 14 <sup>th</sup> November, 2017  |
| 12. | Online Exam form submission with late fee :  |   | 14 <sup>th</sup> November 2017 - Rs. 100/-<br>15 <sup>th</sup> November 2017 - Rs. 500/-<br>On 16 <sup>th</sup> Nov. 2017 exam form submission with permission from Director & late fee of Rs. 2000/-                        |
| 13. | End-term Theory Exam/Practical Exam  | : | 16 <sup>th</sup> November-15 <sup>th</sup> December 2017   |
| 14. | Result Declaration   | : | 23 <sup>rd</sup> December 2017 onwards   |
| 15. | Winter Break   | : | 26 <sup>th</sup> – 30 <sup>th</sup> December 2017  |
| 16. | Teaching starts (Even Semester)  | : | 1 <sup>st</sup> January, 2018  |

#### Note-

1. Students not having attendance as per the RGPV, Bhopal norms will not be allowed to appear in examination.
2. Exam fees will be deposited during Registration but it does not mean that the students are eligible to appear in the examination unless he/she fulfils the RGPV requirements.
3. Mid semester exam-III will be for those students who could not appear in previous mid-semester tests due to some valid reason and who have taken prior permission from the HoD.

#### Important Instructions

1. Students are required to register for Odd Semester (July to December, 2017) only by online registration using their IMS ID. Online registration will start on 11<sup>th</sup> July 2017. In case of any difficulty, the students can send a mail to [ims@mitsgwalior.in](mailto:ims@mitsgwalior.in).
2. Submission of registration documents (registration form, fee receipt etc.) is mandatory to complete the registration process.
3. Students who have forgotten their IMS password will need to apply for a new password by paying a fee of Rs. 50/-
4. Students are required to report to their concerned departments along with the printed copy of the online registration form between 24<sup>th</sup> – 26<sup>th</sup> July 2017.
5. For each student it is compulsory to appear in two mid semester examinations. The mid-semester marks will be awarded by taking the average of two mid-semester examination marks.
6. It is compulsory for all Ph.D. candidates who are registered at MITS research centre to register on the above mentioned dates and submit all their past fee dues. They are also required to submit the copy of all the past receipts, registration letter from the university along with their progress reports duly signed by their supervisors in the office of the Dean, R&D.
7. Students are required to submit the Affidavit/Undertaking duly signed by their Parent/ guardian regarding fulfilling the attendance requirements and not indulging in any act of indiscipline. The format of the same is available on the Institute website.
8. The students whose result is not declared/not eligible for year promotion and applied for revaluation/Challenge case are required to provisionally register with the Class Coordinator with the undertaking that if they fail, their provisional registration may be treated as cancelled. Attendance during the period of provisional registration will be counted for fulfilling attendance requirements
9. Students are required to maintain a copy of the fee receipt for any further requirements and verification.

  
(Dr. Manjaree Pandit)  
Dean Academics

**MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR**

(A Govt. Aided UGC- Autonomous Institute affiliated to RGPV, Bhopal)

Website : [www.mitsgwalior.in](http://www.mitsgwalior.in)

Date : ~~06.04.2017~~ 20.7.2017

**Academic Calendar for EVEN Semester: Jan 2018 to June, 2018**

**(BE, B.Arch,M.E./M.Tech, MCA & Ph.D)**


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|---|---|---|
| 1. Online Registration  | : | 24 <sup>th</sup> Dec. – 31 <sup>st</sup> Dec. 2017  |
| 2. Submission of Hard copy of the Registration form with class coordinators | : | 1 <sup>st</sup> January 2018 – 3 <sup>rd</sup> January, 2018  |
| 3. Teaching Starts  | : | 1 <sup>st</sup> January, 2018   |
| 4. Registration with late fee   | : | 1 <sup>st</sup> Jan. To 3 <sup>rd</sup> Jan. 2018<br>(With late fee Rs. 100/- per day)<br>(After 3 <sup>rd</sup> Jan. 2018 registration only in exceptional cases with permission from Director & late fee of Rs. 2000/-) |
| 5. Mid Semester Exam – I & Quiz   | : | 14 <sup>th</sup> to 16 <sup>th</sup> Feb. 2018 (Wed, Thus, Fri)   |
| 6. Mid Semester Break   | : | 26 <sup>th</sup> Feb. – 3 <sup>rd</sup> March, 2018   |
| 7. MITS Day   | : | 10 <sup>th</sup> March, 2018  |
| 8. Mid Semester Exam – II & Quiz  | : | 27 <sup>nd</sup> to 29 <sup>th</sup> March 2018 (Tues, Wed, Thus)   |
| 9. Mid Semester Exam – III & Quiz<br>(See note 3 below)                     | : | 18 <sup>th</sup> April to 20 <sup>th</sup> April 2018 (Wed, Thus, Fri)  |
| 10. Teaching Ends   | : | 20 <sup>th</sup> April 2018   |
| 11. Online Exam form Submission   | : | 18 <sup>th</sup> April – 24 <sup>th</sup> April 2018  |
| 12. Online Exam form submission with late fee                               | : | 25 <sup>th</sup> April 2018 - Rs. 100/-<br>26 <sup>th</sup> April 2018 - Rs. 500/-<br>On 27 <sup>th</sup> April 2018 exam form submission with permission from Director & late fee of Rs. 2000/-                          |
| 13. End-term Theory Exam/Practical Exam                                     | : | 27 <sup>th</sup> April 2018 -26 <sup>th</sup> May 2018  |
| 14. Result Declaration  | : | 4 <sup>th</sup> June 2018 onwards   |
| 15. Summer Vacation   | : | 4 <sup>th</sup> June to 7 <sup>th</sup> July 2018   |

**Note-**

1. Students not having attendance as per the RGPV, Bhopal norms will not be allowed to appear in examination.
2. Examination fees will be deposited during Registration but it does not mean that the students are eligible to appear in the examination unless he/she fulfils the RGPV requirements.
3. Mid semester exam-III will be for those students who could not appear in previous mid-semester tests due to some valid reason and who have taken prior permission from the HoD.

**Important Instructions**

1. Students are required to register for Even Semester (January to May, 2018) only by online registration using their IMS ID. Online registration will start from 24<sup>th</sup> December, 2017. In case of any difficulty, the students can send a mail to [ims@mitsgwalior.in](mailto:ims@mitsgwalior.in).
2. Submission of registration documents (registration form, fee receipt etc.) is mandatory to complete registration process.
3. Students who have forgotten their IMS password will need to apply for a new password by paying a fee of Rs. 50/-
4. Students are required to report their concerned department along with the printed copy of the online registration form between 1<sup>st</sup> – 3<sup>rd</sup> January 2018.
5. For each student it is compulsory to appear in two mid semester examinations. The mid-semester marks will be awarded by taking the average of two mid-semester examination marks.
6. Students are required to submit the Affidavit/Undertaking duly signed by their Parent / guardian regarding fulfilling the attendance requirements and not indulging in any act of indiscipline. The format of the same is available on the Institute website.
7. The students whose results are not declared/not eligible for year promotion and applied for revaluation/Challenge case are required to provisionally register with the Class Coordinator with the undertaking that if they fail, their provisional registration may be treated as cancelled. Attendance during the period of provisional registration will be counted for fulfilling attendance requirements.
8. Students are required to maintain a copy of the fee receipt for any further requirements and verification.

  
(Dr. Manjaree Pandit)  
Dean Academics

**Sample Time Table:**

Period/Day	1	2	3	4	5	6	7
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Time		10:00-10:50	10:50-11:40	11:40-12:30	12:30-1:20	1:20-2:20	2:20-3:10	3:10-4:00	4:00-4:50	
MONDAY	B.E.	IV (NON CBCS)	BTL 402 RA	BTL 401 MT	BTL 405 VKJ	BTL 404 CM	BTP 403 IY			
		IV (CBCS)	BBTL-405 IY	BBTL-402 DSS	BBTL-404 HSC	BBTL-401 RA	BBTP-404 HSC			
		VI	BTL 602 VKJ	BTL 603 RA	BTL 601 SG	BTL 605 DSS	BTS 606 VKJ		BTS 607 VKJ	
		VIII	BTL 801 SG	BTL 802 HSC	BTL 803 IY	BTL 804 VKJ	BTP 801 SG		BTS 806	
	M.Tech	IV	MBTP-941	MBTP-941	MBTP-941	MBTP-941	MBTP-941	MBTP-941		
TUESDAY	B.E.	IV (NON CBCS)	BTL 405 VKJ	BTL 401 MT	BTL 404 CM	BTL 403 IY	BTP 402 RA			
		IV (CBCS)	BBTL-402 DSS	BBTL-404 HSC	BBTL-405 IY	BBTL-403 SG	BBTP-402 DSS			
		VI	BTL 603 RA	BTL 604 CM	BTL 601 SG	BTL 605 DSS	BTP 604 P CM		BTS 607 VKJ	
		VIII	BTL 801 SG	BTL 803 IY	BTL 804 VKJ	BTL 802 HSC	BTL 803 P IY			
	M.Tech	IV	MBTP-941	MBTP-941	MBTP-941	MBTP-941	MBTP-941	MBTP-941		
WEDNESDAY	B.E.	IV (NON CBCS)	BTL 401 MT	BTL 403 IY	BTL 402 RA	BTL 405 VKJ	BTL 404 CM	BTP 405 VKJ		
		IV (CBCS)	BBTL-405 IY	BBTL-401 RA	BBTL-402 DSS	BBTL-403 SG	BBTS-407 DSS			
		VI	BTL 602 VKJ	BTL 604 CM	BTL 601 SG	BTL 603 RA	BTP 603 RA			
		VIII	BTL 801 SG	BTL 802 HSC	BTL 804 VKJ	BTL 803 IY	BTP 802 HSC			
		VIII Chemical					CHL 8662 SG			
	M.Tech	IV	MBTP-941	MBTP-941	MBTP-941	MBTP-941	MBTP-941			
THURSDAY	B.E.	IV (NON CBCS)	BTL 403 IY	BTL 402 RA	BTP 406	BTP 406	BTL 404 CM	BTS 408 HSC		
		IV (CBCS)	BBTL-401 RA	BBTL-403 SG	BBTL-404 HSC	BBTL-405 IY	BBTP-403 SG			
		VI	BTL 602 VKJ	BTL 605 DSS	BTL 604 CM	BTL 603 RA	BTS 608 VKJ			
		VIII	BTL 802 HSC	BTL 803 IY	BTL 804 VKJ	BTL 801 SG	BTS 805 RA			
	M.Tech	IV								
FRIDAY	B.E.	IV (NON CBCS)	BTL 403 IY	BTL 401 MT	BTL 402 RA	BTL 405 VKJ	BTS 407 HSC			
		IV (CBCS)	BBTL-404 HSC	BBTL-402 DSS	BBTL-403 SG	BBTL-401 RA	BBTS-408			
		VI	BTL 601 SG	BTL 604 CM	BTL 602 VKJ	BTL 605 DSS	BTP 602 VKJ			
		VIII	BTS 806					BTS 806		
		VIII Chemical					CHL 8662 SG	CH P 8662 SG		
	M.Tech	IV								

**1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**

• Teachers are encouraged to attend and participate in various faculty



development Programmes, seminars, conferences and workshops in India and abroad to update their knowledge.

- The faculty members are encouraged to enhance their qualifications by providing study leave, deputing under the Quality Improvement Program of Ministry of Human Resource and Development (MHRD), no fee for in-house Ph.D. Program
- High-speed Internet facility is available in library to access e-Journals.
- All the faculty members are given computer facilities alongwith internet and telephone connection in their chambers.
- Faculty members are provided stationery, books as per their requirements.
- Basic and advanced pedagogy training is provided to faculty members regularly.

**1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

- Laptops and Tablets are provided to the faculty members for classroom teaching.
- All the classrooms are equipped with LCD projectors and other modern teaching aids.
- Curriculum delivery through open learning sources through MOOC, ICT, NPTEL etc.
- All the laboratories are equipped with state-of-art equipments/ software as per the need of curriculum and for research work.
- The course syllabus is reviewed and updated from time to time by taking inputs from alumni through informal discussions, suggestions from academic experts and industry.
- The drafts are taken up for discussions at the Board of Studies meetings before the approval in the academic council.



Finally,  
a comprehensive document stating the framework of the curriculum is released and implemented.

**Summary of MOOC courses conducted by IIT Bombay (iitbombayx.in)**

S.No.	Course Name	Duration	Branch/Year	Teacher In-charge	Total Students Enrolled	Total Students Passed	Pass Percentage	Total Students Fail	Fail Percentage
1	Introduction to Computer Programming(CS101.xA15)	July-Nov 2015	Architecture /1st Year	Prof. Rajni Ranjan Singh	35	32	91%	03	9%
			Civil/IT/BT 1 <sup>st</sup> Year	Prof. Manish Dixit	223	188	84%	35	16%
			CSE/Mechanical 1 <sup>st</sup> year	Dr. Akhilesh Tiwari	257	233	91%	24	9%
2	Thermodynamics(ME209XA15)	July-Nov 2015	Mechanical 2 <sup>nd</sup> year	Prof. Bhupendra Pandey	120	102	85%	18	15%
3	Basic Computer Programming(101.1xS16)	Jan-April 2016	Chemical, E&T, Electrical/1 <sup>st</sup> year	Prof. Manish Dixit	224	184	82%	40	18%
			Automobile, Electronics/ 1 <sup>st</sup> year	Prof. Akhilesh Tiwari	136	100	73%	36	27%
4	Signals and Systems(EE210XS16)	Jan-April 2016	Electronics/ 4 <sup>th</sup> Sem.	Prof. Deepkishore Parsediya	106	80	75%	26	24%
5	Thermodynamics(ME209XA16)	Aug-Nov 2016	Mechanical/ 3 <sup>rd</sup> sem.	Prof. Bhupendra Pandey	84	48	57%	36	42%
<b>Total</b>					<b>1185</b>	<b>967</b>	<b>82%</b>	<b>218</b>	<b>18%</b>

**Rajni Ranjan Singh Makwana**  
**In-charge IIT Bombay MOOC Programme**

**1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?**

Affiliating university has given academic autonomy to the institute to frame its own course curriculum as per the ordinance of the university. To frame the syllabus, the institute adopts the following approaches:

- Department conducts workshops to modify the course curriculum with the experts of industry and research organization.
- Each department is having a Board of Studies, comprising of Head of the Department, two senior faculty members (by rotation for two years), and eminent professors from institute of national importance, alumni, industry personnel and University nominee. The meeting of Board of Studies is conducted every year to recommend the course curriculum for the next academic year.
- The recommendations of Board of Studies are further discussed in academic council and the curriculum is implemented after the approval of the academic council.

**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University?(number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

- Curriculum is designed by members of board of studies of institution.

The constitution of BOS committee is as follows:

1. The HoD chairman BOS committee
  2. All faculty members of the department
  3. One expert nominated by the vice-chancellor, RGPV
  4. Two subject experts from outside the Parent University (outside RGPV)
  5. One member representative from industry/corporate sector/allied area relating to placement
  6. One meritorious alumnus (preferably postgraduate alumnus if available) are members ofBOS
- HOD collect student feedback, teacher feedback and stakeholder

feedback for development of the curriculum.

- The syllabus undergoes modification from time to time in line with technological advancements. This upgradation is conducted in consultation with the members of the BOS, which comprises of experts as discussed above.
- HoD of various department as chairmen/members of Board of Studies and academic council thus supporting the University in framing the course curriculum.

**1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If 'yes', give details on the process ('Needs Assessment', design, development and planning) and the courses for which the curriculum has been developed.**

No.

**1.1.8 How does institution analyze /ensure that the stated objectives of curriculum are achieved in the course of implementation?**

Feedback from stakeholders: students, alumni, parents and employers are collected, analyzed and corrective measures are taken accordingly for effective implementation.

**1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc., offered by the institution.**

#### **Goals and Objectives**

- To provide the best possible education facilities for students and training for making their bright careers in Engineering and Technology.
- To ensure technological up-gradation of students to meet the need of industry by organizing seminars, expert lectures, workshops.
- To encourage faculty for undertaking research and also present/ publish research papers in national/international seminars, conferences and journals.
- To generate new knowledge by engaging in cutting- edge research for overall development of students & society.
- To inculcate understanding of professional and ethical responsibilities.
- To organize quality improvement Programmes for faculty members from reputed national or international engineering colleges and industries.
- To emphasize on value based education through multi-grade modern teaching methodologies and techniques.
- To invite leading industries or companies for the campus placement.

The institute offers the following undergraduate and postgraduate Programmes:

S.No	Programme Name	Course Name	Intake Capacity Allotted To Admission (As Per Aicte)
1.	B.E	Biotechnology	30
2.	B.E	Civil Engineering	120
3.	B.E	Chemical Engineering	60
4.	B.E	Computer Science & Engineering	120
5.	B.E	Electronics Engineering	120
6.	B.E	Electrical Engineering	120
7.	B.E	Information Technology	60
8.	B.E	Mechanical Engineering	120
9.	B.E	Automobile Engineering	60
10.	B.E	Electronics & Telecommunication Engg.	60
11.	B. Arch	Architecture	40
12.	M.E	Construction Technology & Management	25
13.	M.E	Construction Technology & Management-PT	5
14.	M.E	Structural Engineering	7
15.	M.E	Measurement & Control	12
16.	M.E	Communication Control & Networking	25
17.	M.Tech	Information Technology	18
18.	M.Tech	Computer Science & Engineering	18
19.	M.E	Industrial Systems Drives	25
20.	M.E.	Public Health Engineering	12
21.	M.Tech	Production Engineering	18
22.	M.Tech	Biotechnology	18
23.	M.Tech	Microwave Engineering	18
24.	M.Tech	Cyber Security	18
25.	M.Tech	Chemical Engineering	18
26.	M.E	Environmental Engineering	18
27.	M.E.	Geo Informatics	18
28.	MCA	Computer Application	60
29.	M. Arch	Urban Planning	18

Certificate/diploma/ skill development courses offered by the institute in collaboration with various government and industrial organizations:

- IBM Certification
- Infosys Certification campus connect Programme

- IIT Massive open online courses (Moocs)
- Career Launcher Communication skill training
- ISTE Chapter skill development Programme
- ACM Chapter skill development Programme
- Entrepreneurship Development Cell (EDC) organizes various certificate programmes for self employment.
- Certificate courses by SKF India LTD
- IET chapter certificate program

**1.2.2 Does the institution offer Programmes that facilitate twinning /dual degree? If 'yes', give details.**

No, at present the institution does not offer Programmes that facilitate twinning /dual degree but the institute has recently signed MoU with Delhi Technical Univerity for Twinning Program under twinning arrangement of TEQIP-III scheme of MHRD for collaborative work.

**1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond: Range of Core / Elective options offered by the University (RGPV, Bhopal) and those opted by the college.**

Each department offers elective subjects in undergraduate program from third year onwards as given below:

**LIST OF ELECTIVE SUBJECTS COURSE-WISE, SEMESTER-WISE & BRANCH-WISE**

B.E. CIVIL ENGINEERING			
S.No.	Semester	Subject Code	Subject Name
1	V	BCEL - 501	Elective - I* Construction Planning and Management
2	V	BCEL - 502	Elective - I* Traffic Engineering
3	VI	BCEL - 602	Elective – II * Solid Waste, Air & Noise Pollution
4	VI	BCEL - 603	Elective – II * Environmental Impact Assessment & Ethics
5	VII	CEL - 705	Elective – I (Industrial Waste Treatment)

6	VIII	CEL - 804	Elective-II (Building Environment & Services)
M.E. (CTM)			
	III	MCTL 931	Elective I
	III	MCTL 932	Elective II
M.TECH. (ENVIRONMENTAL ENGINEERING)			
	III	MENL 931	Elective I  (1) Industrial Wastewater Treatment & Management (2) Air and Water Quality Modeling (3) Environmental Planning (4) Ground Water Hydrology (5) Building Environment
	III	MENL 932	Elective II  (1) Instrumentation and Process Control (2) Contaminant Transport (3) Principles and Design of Biological Treatment Systems (4) Environmental Risk Assessment and Management (5) Environmental Economics and Management.
M.E. (STRUCTURAL ENGINEERING)			
	III	MSTL 931	Elective I  Finite Element Method  Foundation Engineering  Computer Applications
	III	MSTL 932	Elective II  Reliability Analysis and Design of Structures Earthquake Resistant Design of Structures Advanced Design of Steel Structures
B.E. MECHANICAL ENGINEERING			
	V	BMEL- 501	Elective-I* Metrology, Measurement and Control
	V	BMEL - 502	Elective-I* Aerospace propulsion



	VI	BMEL - 602	Elective-II* Computer Integrated Manufacturing
	VI	BMEL - 603	Elective-II* Power Plant Engineering
	VII	MEL - 705	Elective* -I Non conventional energy sources
	VII	MEL -708	Elective* -I Production & Operation & Management
	VII	MEL -709	Elective* -I Computer Integrated Manufacturing
	VII	MEL - 710	Elective* -I Material & Handling
	VII	MEL - 711	Elective* -I Machine Tool Technology
	VIII	MEL - 804	Elective – II SQC/SPC
	VIII	MEI - 807	Elective – II Maintenance Management
	VIII	MEL - 808	Elective – II Project Management
	VIII	MEL – 809	Elective – II Emerging Technologies & Management Techniques
	VIII	MEL -810	Elective - II Optimization Techniques
<b>M.TECH. (PRODUCTION ENGINEERING)</b>			
	I	560105 560106 560107 560108	Elective* – I Ergonomics and Work Study Elective* – I Project Management Elective* – I Reliability Availability and Maintainability Elective* – I World-Class Manufacturing
	II	560205 560206 560207 560208	Elective-II* Engineering Estimation & Costing Elective-II* Flexible Manufacturing System Elective-II* Concurrent Engineering Elective-II* Logistics & Supply Chain Management
<b>B.E. AUTOMOBILE ENGINEERING</b>			
	V	BAUL - 501	Elective-I* Entrepreneurship & Management

	V	BAUL - 502	Elective-I* Industrial Engineering
	VI	BAUL - 602	Elective-II* TQM & SQC
	VI	BAUL - 603	Elective-II* Operations Management
<b>B.E. ELECTRICAL ENGINEERING</b>			
	V	BEEL502	Elective-I* Electric Power Generation and Economy
	V	BEEL503	Elective-I* Non-conventional Energy resources, challenges & applications
	VI	BEEL601	Elective-II* Computer Aided Design of Power Apparatus & Machines
	VI	BEEL602	Elective-II* Electrical Machines III
	VII	EEL704A	Elective I* EHV AC & HVDC Transmission
	VII	EEL704B	Elective I* High voltage Engg.
	VII	EEL704C	Elective I* System Engg. & Reliability
	VII	EEL704D	Elective I* Electronic Instrumentation
	VII	EEL705A	Elective II* Energy Audit & Management
	VII	EEL705B	Elective II* Digital Signal Processing
	VII	EEL705C	Elective II* VLSI Design
	VII	EEL705D	Elective II* Robotics & computer Vision
	VIII	EEL803A	Elective III* Process Instrumentation
	VIII	EEL803B	Elective III* Biomedical Instrumentation
	VIII	EEL803C	Elective III* Advanced Electrical Drives
	VIII	EEL803D	Elective III* Testing commissioning operation & maintenance of electrical equipment
	VIII	EEL804A	Elective IV* Soft computing Techniques
	VIII	EEL804B	Elective IV* Parallel and Distributed computing
	VIII	EEL804C	Elective IV* Image Processing and pattern

			Recognition
	VIII	EEL804D	Elective IV* Communication Engg.
<b>M.E. (INDUSTRIAL SYSTEMS &amp; DRIVES)</b>			
	I	580105	Elective-I* (i) Power Quality and FACTS Controllers
	I	580106	Elective-I* (ii) High Voltage Industrial Practices
	II	580205	Elective –II* (i)Restructured Power System
	II	580206	Elective –II* (ii) Digital Signal Processing
<b>M.E. (MEASUREMENT &amp; CONTROL)</b>			
	I	590105	Elective-I* Power Quality and FACTS Controllers
	I	590106	Elective-I* High Voltage Industrial Practices
	I	590107	Elective-I* Telemetry and Remote Control
	II	590205	Elective –II* Process dynamics and Control
	II	590206	Elective –II* Digital Signal Processing
	II	590207	Elective –II* Bio medical instrumentation
<b>B.E. ELECTRONICS ENGINEERING</b>			
	V	BELL503	Elective – I* Electromagnetic Fields
	V	BELL509	Elective -1* Optimization techniques
	V	BELL 510	Elective -1* Renewable energy resources
	V	BELL 511	Elective -1* Mechatronics
	VI	BELL604	Elective-II* Electronic System Design
	VI	BELL609	Elective-II* Data Structure
	VI	BELL610	Elective-II* Integrated circuits
	VI	BELL611	Elective-II* Microcontroller and Embedded Systems

	VII	ELL705/7445(i)	Elective – III* Selected topics in communication
	VII	ELL705/7445(ii)	Elective – III* (ATM Networks)
	VII	ELL705/7445(iii)	Elective – III* CMOS Technology
	VII	ELL705/7445(iv)	Elective – III* Data Mining and Warehousing
	VIII	ELL804/8444(i)	Elective – IV* Image Processing and Pattern Recognition
	VIII	ELL804/8444(ii)	Elective – IV* Neural Network and Fuzzy Systems
	VIII	ELL804/8444(iii)	Elective – IV* Nanotechnology
	VIII	ELL804/8444(iv)	Elective – IV* Biomedical Instrumentation
<b>M. TECH. (MICROWAVE ENGINEERING)</b>			
	II	MW2413/ MMWL923(i)	Elective I* Numerical Methods in Electromagnetic
	II	MMWL923(ii)	Elective I* Digital Signal Processing
	III	MMWL931(i)	Elective-II* Advanced Communication Systems
	III	MMWL931(ii)	Elective-II* Telecommunication Network
	III	MMWL932(i)	Elective-III* Advanced Computer Architecture
	III	MMWL932(ii)	Elective-III* Radar System
<b>M.E. (COMMUNICATION CONTROL &amp; NETWORKING)</b>			
	II	MCCL921	Elective I* (I) Internet and Network Security (II) Wireless and Adhoc Network (III) Computer Graphics (IV) Microwave Circuits Design
	III	MCCL931(i)	Elective-II* Advanced Communication Systems
	III	MCCL931(ii)	Elective-II* Telecommunication Network
	III	MCCL932(i)	Elective-III* Advanced Computer Architecture

	III	MCCL932(ii)	Elective-III* Radar System
<b>B.E. ELECTRONICS &amp; TELECOMMUNICATION</b>			
	V	BETL503	Elective -1* Electromagnetic Fields
	V	BETL509	Elective -1* Optimization techniques
	V	BETL 510	Elective -1* Renewable energy resources
	V	BETL 511	Elective -1* Mechatronics
	VI	BETL604	Elective-II * Electronic System Design
	VI	BETL609	Elective-II* Data Structure
	VI	BETL610	Elective-II* Integrated circuits
	VI	BETL611	Elective-II* Microcontroller and Embedded Systems
<b>B.E. COMPUTER SCIENCE &amp; ENGINEERING</b>			
	V	BCSL502	Elective – I* Networking with TCP/IP
	V	BCSL509	Elective – I* Internet Technology & web Designing
	V	BCSL510	Elective – I* Management Information System
	VI	BCSL601	Elective – II* Parallel Processing
	VI	BCSL609	Elective – II* Information Theory & Coding
	VI	BCSL610	Elective – II* Cloud Computing
	VII	CSL 705	Elective-I* Internet Technology & web Designing
	VIII	CSL 804	Elective-II* Cellular and Mobile communication
<b>B.E. (INFORMATION TECHNOLOGY)</b>			
	V	BITL502	Elective – I* Networking with TCP/IP
	V	BITL509	Elective – I* Internet Technology & web Designing
	V	BITL510	Elective – I* Management Information System
	VI	BITL601	Elective – II* Parallel Processing

	VI	BITL609	Elective – II* Information Theory & Coding
	VI	BITL610	Elective – II* Cloud Computing
	VII	ITL 705	Elective-I* Internet Technology & web Designing
	VIII	ITL 804	Elective- II* Neural Networks & Fuzzy Systems
<b>B. E. CHEMICAL ENGINEERING</b>			
	V	BCHL501	Elective - I* Fluidization Engineering
	V	BCHL502	Elective - I* Nano Technology
	VI	BCHL602	Elective–II* Inorganic Process Technology
	VI	BCHL603	Elective–II* Polymer Technology
	VII	CHL705	Elective I
	VIII	CHL804	Elective II
<b>B.E. BIOTECHNOLOGY</b>			
	V	BBTL 501	Elective-1* Biomass Conversion Technology
	V	BBTL 502	Elective-1* NMR Technology
	VI	BBTL 602	Elective-II* Enzyme Technology
	VI	BBTL 603	Elective-II* Proteomics & Genomics
	VII	BTL705	Elective-1* A. Biosafety Bioethics & IPR B. Bioreactor Design and Analysis C. Metabolic engineering D. Bionanotechnology
	VIII	BTL804 A, B, C, D	Elective-II*  (A) Process Dynamics & Control (B) Industrial Economics & Management (C) Tissue Engineering (D) Protein Engineering
<b>BACHELOR OF ARCHITECTURE</b>			
	V	AR506	Elective-I* Graphic Design
	V	AR508	Elective-I* Animation

	V	AR509	Elective-I* Design Thinking
	VI	AR606	Elective-II* 1. Vastu 2. Sustainable Architecture 3. Intelligent Buildings 4. Housing
MASTER OF COMPUTER APPLICATIONS			
	IV	680403	Elective – I* Unix and Shell Programming
	V	680504	Elective-II* (.NET Technologies and C#)
	V	680505	Elective –III* (Data Warehousing and Mining)

The choice of the student to opt elective subject is considered and accordingly courses are run by the department.

In addition to above, department conducts industrial visit in each semester and industrial training is mandatory for the partial fulfillment of the degree and thus helps the student in terms of skill development.

Institute and department promotes students to carry project work and dissertation in research institutes of national repute/ industries for academic mobility

**1.2.4 Does the institution offer self-financed Programmes? If 'yes', list them and indicate how they differ from other Programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.**

Yes, the institution offers the following self-financed Programmes:

- B.E. Information Technology
- B.E. Biotechnology
- B. E. Chemical Engineering
- B.E. Automobile Engineering
- B.E. Electronics & Telecommunication Engineering
- M.Tech. Microwave Engineering
- M.Tech. Computer Science and Engineering
- M.Tech. Information Technology
- M.Tech. Biotechnology
- M.Tech. Chemical Engineering
- M.Tech. Cyber Security
- M.Tech. Production Engineering
- M.E. Measurement and Control

- M.E. Structural Engineering
- M.E. Material Handling
- M.E. Public Health Engineering
- M.Tech. Geo-Informatics
- M.E. Environment Engineering

All the above Programmes are at par with the other Programmes offered by the institute, only they differ in fee structure as per the M.P. Government norms.

Salary and qualifications of all the faculty members are as per the state government/AICTE norms.

**1.2.5 Does the college provide additional skill oriented Programmes, relevant to regional and global employment markets? If 'yes' provide details of such Program and the beneficiaries.**

Yes, Institute organizes skills development Programmes such as training for campus preparation, training Programme for acquiring IBM certification, certificate program by SKF Ltd. Pune and organizes various Entrepreneurship Programmes for students and faculty members.

**1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice" If 'yes', how does the institution take advantage of such provision for the benefit of students?**

No

**1.3 Curriculum Enrichment**

**1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic Programmes and Institution's goals and objectives are integrated?**

The institute supplements the University's curriculum by conducting:

- Industrial visits are arranged for the students to integrate the theory and the actual practices in the Industries.
- Eminent persons from industries and reputed Institutions are invited for updating the current happenings to the students.
- The students are encouraged to attend vocational training.
- Covering topics beyond syllabus.
- Conducting training Programmes in logical and analytical skills



- Remedial classes for academically weaker students.

**1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?**

Experienced faculty members provide a very thorough presentation of the subjects which makes the theoretical foundation of the students. The regular discussion on the question pattern of different competitive examinations, results in successful qualification of students.

During seminars and workshops suggestions from expert and industry people are sought for understanding the scenario of the job market. Additional classes for improved soft skills and personality development Programmes are arranged.

Campus placements for students are arranged in the college by renowned companies like TCS, Accenture, Wipro, Infosys etc. During these Placement Programmes a feedback is taken from the companies regarding how one should get equipped for getting jobs.

**1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate change, Environmental Education, Human Rights, ICT etc., into the curriculum?**

Initiatives by the Institution towards	Activities
Gender	<ul style="list-style-type: none"> <li>• No discrimination among students in the class rooms and labs.</li> <li>• The Institute regularly organizes expert lecture on issues like women empowerment.</li> </ul>
Environmental Education	<ul style="list-style-type: none"> <li>• The subject "Environmental Science" is included as part of the curriculum (EEES). It is compulsory for all the students, irrespective of the stream.</li> </ul>
Human Rights	<ul style="list-style-type: none"> <li>• Anti-ragging awareness Programme</li> <li>• Election duty</li> <li>• Community Service</li> <li>• Discipline committee monitors any indiscipline issues relating to ragging</li> </ul>
ICT	<ul style="list-style-type: none"> <li>• IIT Bombay Remote Center has been established</li> <li>• LCD equipped classrooms, Computer lab, and library.</li> </ul>

#### **1.3.4 What are the various value-added courses / enrichment Programmes offered to ensure holistic development of students?**

- **moral and ethical values**
- **employable and life skills**
- **better career options**
- **community orientation**

The N.C.C. and N.S.S. wings of the College help the students in community orientation, personality development and acquiring life skills. Better career options are taken care of by the Training and placement cell of the college. Following activities are organized under association with MITS & NSS:

- Medical Camp (Cardio Camp )
- Medical Camp cum Seminar on Eye
- Dental Camp cum Seminar on “Tobacco”
  - Dress Distribution - occasion of birthday of late H. H. Shrimant Madhav Rao Scindia.
  - Traffic Awareness Program
  - Seven Days Special Residential Camp (Rural)
  - Stationery distribution
  - Blood Donation Camp
  - Youth Awareness Program, etc.

NSS Unit, MITS was formed in academic year 2011-12 with following objectives:

- To enable the students to understand the community in which they work
- To enable the students to understand themselves in relation to their community
- To identify the need and problems of the community and involve them in problem-solving
- To develop among themselves a sense of social and civic responsibility
- To Utilise their knowledge in finding practical solution to individual & community problems
- To develop competence required for group living and sharing responsibilities
- To gain skills in mobilizing community participation
- To acquire leadership qualities and democratic attitudes
- To develop capacity to meet emergencies and natural disasters and
- To practise national integration and social harmony

#### **1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?**

The institution collects feedback from the stakeholders in enriching the curriculum in the following manner:

- In every semester feedback is collected from students. The students express their opinion on curriculum through response sheets.
- Alumni and parents to register their views during interface meetings.
- From recruiters, informal feedback is collected during campus recruitments
- The departmental committee analyses the feedback and prepares response chart for enriching the curriculum.
- The teachers collect the final year students feedback regarding learning processes at the end of academic session every year
- The suggestions are obtained from the stake holders time to time and further used to manage the overall proficiency of the students for employability.

### **1.3.6 How does the institution monitor and evaluate the quality of its enrichment Programmes?**

Coordinator of the Programme monitor and evaluate the efficiency and the success of these enrichment Programmes. The feedback for enrichment Programmes is taken on the basis of objectives, content of the Programme, resource persons and the method of delivery. The Institute ensures that the curriculum bears a thrust on these core values including the focus on contribution to society and development of nation. The enrichment Programmes conducted by the institution are evaluated on the basis of:

- Student achievements.
- Campus Placements.
- Attitude and personality of students.
- Feedback from the stakeholders.
- Feedback from industry persons
- Faculty contribution and achievements
- Contribution to society

## **1.4 Feedback System**

### **1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?**

Numbers of faculty members are chairman/members of Board of Studies and academic council and they are supporting the University in framing the course curriculum.

### **1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the**

**University and made use internally for curriculum enrichment and introducing changes/new Programmes?**

Yes, a mechanism is adopted for obtaining feedback from the students and the stakeholders on the curriculum. The feedback is collected and communicated to the University during periodic meetings. The senior faculties who are members in the various boards of studies/syllabus committees collect suggestions from students and other faculty members and update syllabus accordingly. The alumni also give constructive suggestions on helping the students to concentrate with greater focus and improving themselves.

**1.4.3 How many new Programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/Programmes?)**

The institution during the last four years in PG has introduced the following Programmes and UG are:

S.No	UG/ PG	Branch	Duration
1	UG	B.E.(Automobile Engineering)	4 Years
2	UG	B.E.( Electronics & Telecommunication Engg.)	4 Years
3	PG	M.Tech. Geo Informatics	2 Years
4	PG	M.Tech. Environment Engineering	2 Years
5	PG	M.Tech. Cyber Security	2 Years
6	PG	M.Tech. Chemical Engineering	2 Years

The above Programmes were introduced on the basis of demand by the employers.

## **CRITERION II: TEACHING - LEARNING AND EVALUATION**

### **2.1 Student Enrollment and Profile**

#### **2.1.1 How does the college ensure publicity and transparency in the admission process?**

Admissions for Undergraduate and MCA Program is done by state government. For postgraduate Programmes admission, advertisement is given in leading newspapers at the national level.

#### **2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various Programmes of the Institution.**

Admission to B.E. courses is done through counseling by Directorate of Technical Education (DTE), M.P. Government Bhopal, on the basis of JEE mains. The admission to B.Arch. course is done through state level counseling on the basis of National Aptitude Test in Architecture (NATA), an online test conducted by the Council of Architecture, New Delhi and marks obtained in 10+2.

Admissions in M.C.A. is done through Pre MCA test conducted by Govt. of M.P. Admission in Post graduate Programmes is offered on the basis of GATE score/BE percentage. The admission process is done at institute level. Ph.D. Admission Process: On the basis of interview conducted at the institute as per QIP, AICTE guidelines.

**2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the Programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

The following Table shows the programmewise entry-level rank for admission for the year 2016.

S.No	Course	Highest Rank	Lowest Rank
1	BE(Civil Engineering)	38130	1023231
2	BE(Automobile Engineering)	118828	1114005
3	B.Arch.	3	312
4	BE(Biotechnology)	147457	921332
5	BE(Computer Science & Engineering)	27636	968378
6	BE(Electrical Engineering)	23909	993689
7	BE(Chemical Engineering)	42118	973031
8	BE(ElectronicsEngineering)	24776	697588
9	BE(Electronics & Telecomm. Engg.)	107641	1004804
10	BE(Mechanical Engineering )	39460	948838
11	BE(Information Technology)	52579	1072274

The comparison with other colleges of the affiliating university within the city/district is given as follows:

Name of Institution	Year	Highest Rank	Lowest Rank
Institute of Technology and Management, Gwalior	2016	58055	1083893
Madhav Institute of Technology and Science (MITS), Gwalior	2016	8523	1095640

Rustamji Institute of Technology, Gwalior	2016	29193	1089729
Shri Ram College of Engineering and Management - Gwalior	2016	123693	1105623
Bhartiya Vidya Mandir College of Technology and Management	2016	241531	865385
NRI Institute of Technology and Management	2016	79894	1937812
Maharana Pratap College of Technology	2016	89558	1117854
Gwalior Engineering College (GEC)	2016	260705	1103884
Vikrant Institute of Technology and Management, Gwalior	2016	542476	1052316

**2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes' what is the outcome of such an effort and how has it contributed to the improvement of the process?**

No, from the year 2013, the State Government of Madhya Pradesh has decided to admit students to Engineering Colleges of Madhya Pradesh through Joint Entrance Exam (JEE Mains) conducted at All India level by CBSE. The all India ranking is obtained from the 60% score of JEE Mains and 40% score of qualifying examination Board.

**2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

Rules and regulations of M.P. government are followed for admissions in all the Programmes. The category wise admission policy is as per the following table:

S.No.	Categories of Students	Admission Policy of The Institution
1	SC/ST	16% and 20% of total seats reserved for SC and ST Candidate respectively
2	OBC	14% of total seats reserved for OBC Candidate respectively.

3	Women	30% compartmentalized in each category and caste
4	Differently abled	3% reservation in each category
5	Economically weaker sections	5% extra seats provided under Tuition Fee Waiver Scheme (TFW)

**2.1.6 Provide the following details for various Programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement.**

The details for various Programmes offered by the institution during the last four years are given below:

**Student Admission data-2016**

<b>Program me Name</b>	<b>Branch</b>	<b>Number of applicatio ns received</b>	<b>No of students admitted</b>	<b>Demand Ratio</b>
B.E	Biotechnology	*Not applicable	30	Not applicable
B.E	Civil Engineering		128	
B.E	Chemical Engineering		60	
B.E	Computer Science & Engineering		128	
B.E	Electronics Engineering		126	
B.E	Electrical Engineering		127	
B.E	Information Technology		62	
B.E	Mechanical Engineering		127	
B.E	Automobile Engineering		60	
B.E	Electronics & Telecommunication Engg.		61	
B. Arch	Architecture		40	
M.E	Construction Technology & Management	70	24	2.8:1
M.E	Construction Technology & Management-PT	5	-	1:1
M.E	Structural Engineering	12	7	1.7:1
M.E	Measurement & Control	73	10	7.3:1
M.E	Electronics Communication	111	25	4:1.



	Control & Networking			
M.Tech	Information Technology	200	07	11.1:1
M.Tech	Computer Science & Engineering	205	14	18.2:1
M.E	Industrial System Drives	14	17	1:1
M.Tech	Production Engineering	40	18	2:1
M.Tech	Biotechnology	6	-	-
M.Tech	Microwave Engineering	110	18	6:1
M.Tech	Cyber Security	91	18	5:1
M.Tech	Chemical Engineering	6	-	-
M.E	Environmental Engineering	17	11	1:1
MCA	Computer Application	* Not applicable	54	*Not applicable

\* The admissions are done through centralized counseling process conducted by DTE, Bhopal M. P.

## 2.2 Catering to Student Diversity

### 2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

The institution is fully adhering to governmental policies regarding the needs of differently-abled students. Seats are reserved at the time of admission in various Programmes. The college makes sure that the classes of such students are held at ground floor to the possible extent. Ramps and separate sanitary facilities are being provided.

### 2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the Program? If 'yes', give details on the process.

The minimum qualification for B.E. is intermediate (10+2) or equivalent with physics, Chemistry and Mathematics. The minimum qualification for B.E. II year (Lateral Entry) is three-year engineering diploma in any branch of engineering (except Architecture) with minimum 60% marks. Students enter engineering colleges from different State board (Hindi, English medium, CBSE or MP Board). Their level of knowledge in key subjects and their assessment in school also varies widely. So the gaps in the entry level due to the above are bridged before the commencement of the first year classes by conducting an orientation Program in the key subjects.

### 2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/Enrichment Courses, etc.) to enable them to cope with the Program of their choice?

- Remedial classes are conducted by faculty for weak students.
- Personality development Programme: T&P cell organizes personality development classes for the overall development of the students.
- All Departments of the institution conduct expert talks by the experts from various industries, research organizations and academics.
- Extra classes are conducted for Programmemeing languages.

**2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?**

Institute takes care of all the necessary requirements of females in the campus. A Grievance Cell is in place to address gender discrimination issues. Students and staff are active members of the NSS, NCC etc and take part in many voluntary activities, both in the college campus and in nearby villages, to encourage the protection of environment, emphasize sustainable development, propagate use of alternate source of energy (solar/wind energy), etc.

**2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**

The institution identifies the advance learners on the basis of their passing grade, classroom performanceand regularity in submission of assignment, promptness and personal interactions. The college pays following attention to advanced learners:

- Facilitated with state of the art facilities in terms of well equipped library provided with latest edition of books, e-Books, online journals, CD ROMs and modern labs and other amenities.
- Meritorious students are rewarded with certificate and prize money
- They are sponsored to participate in the national/international conferences and technical symposia.
- Guest lecturers are invited from prestigious institutions and industries.
- Admittance to Centres of Excellence and enrolment in training Programmes.

**2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the Program duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?**

There has been very less number of dropouts in UG and in PG course. The slow learners and students from disadvantaged communities are given extra classes/ training after the normal working hours of the college and arrange special classes, remedial classes and tests for the needy students. Further, verbal and

motivational lecture or counseling is done for weak students by mentor/senior faculty members regularly.

## 2.3 Teaching-Learning Process

### 2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

Academic calendar is prepared by Dean Academic after discussion with the Director and Head of departments. The schedule is presented in the academic calendar displayed at notice board, course manual and college website prior to the commencement of the classes for the new academic session.

Preparation of the comprehensive lesson plan for the semester by individual teacher is mandatory. The college has started online attendance where a provision has been made to show the course contents covered during a lecture by the faculty. At the end of each semester, students are assessed internally on the basis of attendance, assignments, quiz, presentation, mid semester examinations and end semester examination.

### 2.3.2 How does IQAC contribute to improve the teaching-learning process?

IQAC conducts the meetings of the members of the committee for the improvement in teaching - learning process. Following are the contributions of IQAC in improving teaching -learning process:

- To review the process and format of Academic Audit
- The IQAC recommend to the department the various approaches for syllabus coverage, improvement of pass percentage, assessment of learning outcomes.
- A feedback form to be filled by students so that the teaching quality of the teacher can be evaluated.
- To consider the lecture based quality assurance of teaching learning.
- To increase effectiveness of remedial classes for socio-economically and academically weak students
- To use of on-line platforms like MOODLE effectively for teaching and assessment.

### 2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

The institute provides support to the teacher for creating the learning student centric in following ways:

- Provide encouragement to the students to use internet and computers to keep updated with respect to latest technology and innovations.

- Motivate the students for participation in technical Programmes.
- Visits are arranged to industries, institution of higher education and research, and national laboratories for practical knowledge.
- MoUs are signed with various industries for providing training and employment.
- Regular guest lectures by eminent experts from industry and academia are organized to address novel areas.
- Encourage faculty members to develop new experiments beyond syllabus.
- Central computing, LAN facilities, e-Library facilities help teachers and students in teaching learning process.
- A library with latest books and journals helps to provide latest and comprehensive information to the students
- The teachers frequently give illustrations and discuss the technical aspects in order to acquaint the students with the practical insight of the subject.

#### **2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?**

The institute motivates the students to participate in National and International seminars and present their research papers. Emphasis is given on increasing the employability of the students and putting them at ease with the employer's expectations by developing the essential skills.

A collaborative environment is established between industry and academia by virtue of joint projects and consulting assignments. Undergraduate and post graduate students are groomed in such a manner that projects undertaken by them are so chosen that they can be extended towards research work at a later stage. All the departments have professional society associations under which several Programmes are conducted to nurture creativity and scientific temper among the students.

Following facilities/infrastructure are available to the students for continuous learning:

- Teachers use smart classrooms with e-station for effective knowledge sharing.
- In addition to standard text books, the teachers also refer to following latest technologies:

- Video lectures
- Internet based information
- Digital library facility and proceedings of IEEE, ASME, ASCE etc.
  
- e-journals and e text books
- NPTEL videos
- Teachers concentrate on core technologies as per syllabus, which the students are intended to learn.
- 24 hours internet and library facility.
- Every department has a seminar hall with LCD projector.
- Every staff room has computer with internet facility.
- There are 35 staff members working for higher education and are active with all these sources of information.

**2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? e.g: Virtual laboratories, e-learning - resources from National Program on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc**

The following technologies are used by the faculty of the institute to achieve effectiveness in teaching:

- Faculty members use e-learning resources from National Program on Technology Enhanced Learning (NPTEL) to deliver lectures.
- Faculty participated in NMEICT Programme organized by IIT Bombay and IIT Kharagpur under the Faculty development Program, enhancing their knowledge.
- Virtual Lab is an initiative of Human Resource Development (MHRD) under the National mission on education through Information and Communication Technology (ICT).
- To understand working models, free open courseware from national reputed institute like NITs, IIT, etc is accessed for effective teaching.
- Institute uses tools such as SMART board with data storage facility, multimedia projectors, OHP etc.
- Institute has signed MoU with IIT Bombay for IIT Bombay Blended MOOC and currently running two courses: Computer Programming and Thermodynamics.
- Institute is also a remote center of IIT Bombay and IIT Kharagpur for the conduction of workshops and other academic activities under MHRDs National Mission on Education through ICT. Faculty members are

regularly attending the workshops which are being conducted by IIT Bombay and IIT Kharagpur and thus enhancing their knowledge for achieving effectiveness in teaching.

### **2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

The Institute sponsors and organizes FDPs/ workshops for faculty members. Expert lectures by eminent people from industries/other academic institutions are arranged from time to time. The Institute encourages the students and the faculty to present the papers in national and international seminars/workshops and attend faculty development Programme at institutions of national repute. The Institute and faculty adopt various strategies for the effective teaching, which are as follows:

- The teaching aids like slides, comparative charts, photographs, pictorial materials, and information and communication tools, Practical Training Booklets etc. are used as per requirement to make the teaching and learning experience more effective and interesting.
- The students are encouraged to participate in various technical seminars and workshops conducted by other institutions, universities in and outside the state.

### **2.3.7 Detail (process and the number of students\benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?**

Faculty members have taken various initiatives in addressing the academic, psycho-social & personal needs of the students. The faculty identifies the students who need counseling. The students are free to discuss their problems and weaknesses, whether personal or educational. Beside this, all students are counseled by Director, HoDs and faculty members in general from time to time during regular academic interactions. The additional academic, personal and psycho-social support and guidance services offered by the Institute are:

- Guest lectures by eminent people from industries/other academic institutions are arranged at regular intervals.
- The Institute sponsors and encourages the students and the faculty to present the papers in national and international seminars/workshops.
- The Institute organizes seminars and workshops by inviting eminent professionals having expertise in their respective areas. The student and

faculty community actively participate to reap benefits out of them.

- Motivational lectures and meditation classes are conducted free of cost for stress management.

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

Institute encourages the faculty to utilize library resources and e-resources to update learning and use other technological aids which help in enhancement of knowledge and skills. Following innovative teaching approaches/methods are adopted by the faculty during the last four years:

- Teaching through smart class software & e-class room.
- Teaching through Power-point presentations
- NPTEL resources
- Providing access to online journals throughout the campus.
- Use of language lab for enhancing language skills.
- Organizing inter college and intra college technical contests
- Expert Lecture Series
- A-View resource centre for the conduction of various workshops under MHRDs National Mission on Education through ICT.
- Institute has availed IEEE and Science direct subscriptions and faculty & students are encouraged to utilize these resources to update their knowledge base.

**2.3.9 How are library resources used to augment the teaching-learning process?**

Library resources are augmented to enhance teaching-learning process through:

- Every year books, magazines, journals are added as per the need of staff and students.
- E- Journals facility
- NPTEL link is available in the library
- Wi-Fi enabled campus
- Students make use of library after teaching hours.
- Teachers also use various CDs, open source materials, hard copy and e-journals to improve their knowledge skills.



**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.**

No

**2.3.11 How does the institute monitor and evaluate the quality of teaching learning?**

Evaluation of teacher's performance is done every semester. The institution has a feedback system to evaluate the teachers by students. At the end of each semester, the feedback from students is obtained by issuing printed questionnaires relating to all subjects. In this feedback, questions regarding performance of the teachers are sought. Their feedback is analyzed by the concerned HOD. Based on assessment of performance, HOD gives necessary directions for the improvement in the teaching methods. The Director also monitors the feedback system and takes appropriate corrective measures. The Institute monitors and evaluates the quality of teaching by following methods:

- Feedback for faculty is collected twice in a semester
- Feedbacks are analyzed by the class coordinator
- Director and HODs initiate remedial measures
- Counseling of staff for better performance
- Course files prepared by faculty.
- Analysis of student performance in mid-term and end term examinations
- Quality final year project
- Attendance of Students
- Feedback from the alumni



**MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR**

**(An Autonomous Institute under Government of Madhya Pradesh)**

**STUDENT FEEDBACK FORM**

Name of the Department: .....

Class:..... Semester:..... Branch:.....



Name of faculty member: .....

Subject Taught ..... Code:.....

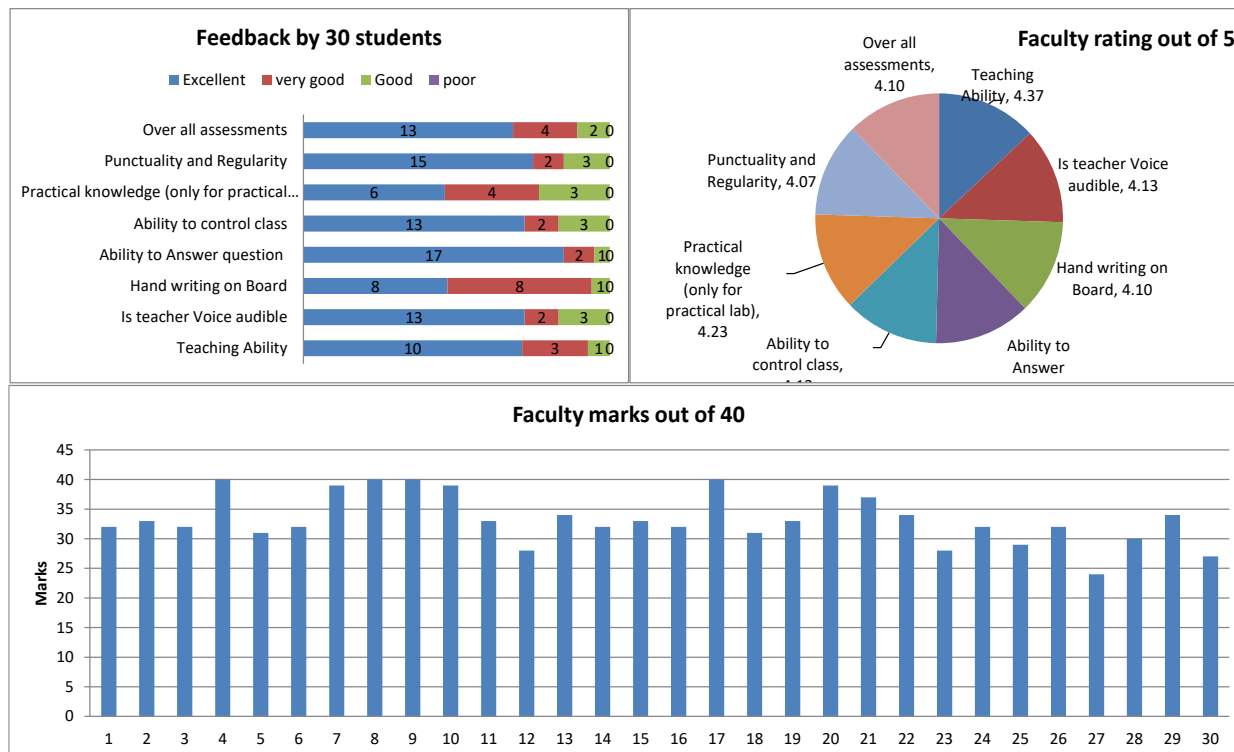
Grading criteria: 5- Strongly agree; 4- Agree; 3- Neither agree nor disagree/Don't know; 2- Disagree; 1- Strongly disagree. If strongly disagree or disagree, give relevant remark

Course/Syllabus	1	2	3	4	5	Remarks
Course meets my career expectations						
Syllabus contents are useful						
Course well designed and structured						
<b>Faculty</b>						
Has good teaching ability						
Teaching style interactive/involving students						
Adequate coverage of course content						
Voice is audible						
Good communication skills						
Has ability to control class						
Has ability to motivate/create interest in subject						
Relates subject with practical examples						
Is approachable & helping						
Provides study material/notes etc						
Inspires students for good behavior and ethical conduct						
Use of innovative teaching methods						
Shows no gender bias						
<b>Only for Laboratory classes</b>						

Availability of teacher in the laboratory for whole duration of laboratory hours							
Helping the students in conducting experiments by giving instructions							
<b>Suggestions for improvement if any</b>							

**Note: This feedback is being taken only for the improvement of teaching-learning in the institute. You should be careful, fair and honest in evaluation (while ticking the boxes).**

### Analysis system of feedbackform



## 2.4 Teacher Quality

**2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum**

Highest Qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	11	3	8	4	12	10	48
M. Phil.					1		01
PG	1	1	5	-	54	23	84
B.E./ B. Arch	-	-	-	-	05	07	12
Total	12	4	13	4	72	30	145

The Institute has a different recruitment policy for regular teaching/ non-teaching staff and temporary teaching/ non-teaching staff.

Recruitment policies for regular teaching/ non-teaching staff:

- After approval from the Board of Governors (BOG), an open advertisement is published for positions in at least two leading newspapers and on the institute website.
- The selection committee comprises of member of BOG, Director, HOD of concerned Programme and experts from the concerned field.
- The process of selection:
  - Except for the professor and associate professor posts, written test is conducted for short listing.
  - Presentation is given by the applicant which is followed by a technical interview.
  - Eligibility as per the AICTE/Affiliating university norms is strictly followed.

Recruitment policies for temporary teaching/ non-teaching staff:

- Each department sends the requirement of teaching/ non-teaching staff to the Director at the commencement of semester.
- Open advertisement is published for positions in at least two national and local newspapers and also uploaded on institute web site.

- The selection committee comprises of Director, HOD and subject experts.
- The process of selection –
  - Eligibility as per AICTE norms.
  - Written test for short listing.
  - Presentation by the applicant followed by a technical interview.

Retention policies:

- A healthy working environment conducive for self growth is offered through well defined transparent and uniform policies. Remunerations and salary as per state govt. pay scale to the faculty members are also ensured by the institute.
- Faculty members are sponsored to attend quality improvement Programmes, seminars, conferences, workshops etc.
- Faculty members are encouraged to organize quality improvement Programmes, seminars, conferences, workshops. All expenses to conduct the above Programmes are borne by the institution.
- Timely increment and other allowances are given as per state government pay scale to the faculty members.
- The faculty members who are pursuing Ph.D. are being exempted from the tuition fee.

**2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new Programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

- Faculty members are promoted to update themselves by attending FDPs/Seminars/Conferences in emerging areas.
- Faculty is sponsored for qualification enhancement with pay under Q.I.P. at national level institutes like IITs.
- Expert lectures are frequently organized by the departments in thrust areas.
- NPTEL lectures and other e-resources are made available to the faculty of such departments to cope up with the scarcity of qualified senior faculty.
- Demonstration through virtual labs.

**2.4.3 Providing details on staff development Programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

**a) Nomination to staff development Programmes**

As per the Training Need Analysis (TNA), faculty members are permitted to attend at least two Faculty Development Programmes/STTPs per year.

<b>Academic Staff Development Programme/ Faculty Development Programmes</b>	<b>Number of faculty</b>
Refresher courses	32
HRD Programmes	23
Orientation Programmes	10
Staff training conducted by the College	35
Staff training conducted by University/other Colleges	40
Summer / winter schools, workshops etc.	128
Any other (Seminars, conferences etc.)	179

**b) Faculty Training Programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning**

- Teaching learning methods/approaches
- Handling new curriculum
- Content/knowledge management
- Selection, development and use of enrichment materials
- Assessment
- Cross cutting issues
- Audio Visual Aids/multimedia
- OER's
- Teaching learning material development, selection and use

Large number of faculty developments Programmes have been organized by the different departments of the Institute, like:

- Workshop on MATLAB Applications
- Faculty development Program on Optimization Techniques for Engineering Applications
- Faculty development Program on Pedagogy
- Faculty development Program on Research Methodology
- Faculty development Program on Recent Advances in Microwave Engineering (three times)
- Workshop on Renewable Energy Sources

- Faculty development Program on Green House
  - Workshop on Computer Aided Drug Design
  - Faculty development Program on Computational Fluid Dynamics
  - Workshop on Recent Trends in Solar Energy
  - Faculty development Program on Nature Inspired Optimization Techniques
- Alongwith the above number of conferences/seminars are organized in the Institute every year.

c) **Percentage of faculty**

- **invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies**  
Approximately 40% faculty members have been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies
- **participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies**  
All the faculty members have participated in various external Workshops / Seminars / Conferences recognized by national/ international professional bodies
- **presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies**  
Approximately 70% of the faculty members have presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies

**2.4.4 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized Programmes industrial engagement etc.)**

Following policies are in place to recharge the faculty members:

- Facilitation to pursue research work by procuring necessary equipments, software etc.
- Faculty members are sponsored to attend FDPs/Short term training Programmes/Seminars/Workshops etc.
- Sponsorship to publish papers in National/International Journals and conference proceedings.
- The institution provides duty leave to faculty for participating and presenting papers at National and International seminars/workshops/conferences.

- Faculty members are encouraged to pursue higher education for upgrading their qualifications. The Institute provides study leave for pursuing M.Tech or Ph.D.

**2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

- Dr. S.K. Jain received Japanese Government Scholarship for Post Doctoral Research.
- Dr. S.K. Jain Biography included in Marquis Who's Who in the world.
- Dr. S.K. Jain received Maharashtra State National Award for outstanding research work in engineering and Technology awarded by ISTE, New Delhi.
- Dr. S.K. Jain received Dr. Jai Krishna Medal by Institution of Engineers (India) for published research paper in the area of Earthquake engineering.
- Dr. S.K. Jain received Khosla Commendation certificate of I.I.T. Roorkee for published research paper in the field of Earthquake Engineering.
- Dr. S.K. Jain received Khosla Second Prize of U.O.R., Roorkee for published research paper.
- Dr. Manjaree Pandit received UGC post doctoral research award for 2 years (salary for 2 years and contingency of Rs. 3.0 lacs)
- Dr. Laxmi Srivastava rewarded for review work, provided free membership (MIEE) by Institution of Electrical Engineers (UK) for one year.
- Dr. Manjaree Pandit received ISTE-Raja Rambapu Patil National Award for promising Engineering teacher.
- Dr. Manjaree Pandit and Dr. Laxmi Srivastava received certificate of merit from Institution of Engineers, for their joint paper.
- Dr. Manjaree Pandit received ISTE-Maharashtra Government National Research Award for work done by teachers of Engineering colleges
- Dr. Laxmi Srivastava received Khosla Research Gold Medal and cash award for Best Research Paper, from I.I.T., Roorkee.
- Dr. Sulochana Wadhvani, Dr. S.P. Gupta and Dr. Vinod Kumar received certificate of merit from Institution of Engineers, for their joint paper .
- Dr. Laxmi Srivastava, received Best paper award on Energy and Power Engineering (ICEPE2011) held at VITS, Mumbai.

- Dr. P.K. Singhal, Department of Electronics received AICTE Career award.
- Dr. Sarvesh Jain, Dept. of Civil Engineering received AICTE Career award.
- Prof. Anil Kumar Saxena received award from AICTE for Best Technical Book in Hindi, "Lok Swasth Yantriki" (in Hindi).
- Dr. C. S. Malvi received the Madhya Pradesh Young Scientist award.
- Dr. Anshu Chaturvedireceived the Madhya Pradesh Young Scientist award.
- Prof. Vedansh Chaturvedi received the Madhya Pradesh Young Scientist award.

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?**

Yes, the evaluation of teachers' performance by the students is done every semester. At the end of each semester, the feedback from students is obtained by issuing printed questionnaires relating to all subjects. The feedback mainly focus on teaching skills of the faculty, presentation, communication, knowledge and content covered. Their feedback is analyzed and necessary directions for the improvement in the teaching methods are given to the faculty members. Also, lecture classes are monitored by the senior faculty members. They give constructive comments to improve the quality of teaching and the teaching-learning process.

## **2.5 Evaluation Process and Reforms**

**2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

The institute makes the stakeholders aware of the evaluation process in the following ways:

- Notice board and Academic Calendar.
- Uploading the scheme and syllabus on institute website.
- Student Manual
- The faculty members are informed about the evaluation process by the Head of the Department.
- Evaluation process is discussed by the faculty members/mentors/class coordinators in the classrooms and the required changes are brought in and informed to the students.



**2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institute on its own?**

Our institute has academic autonomy. All major evaluation reforms of the university adopted in following manner:

- Enrollment numbers of students is allotted as per the code and criteria of the affiliating university.
- All internal and external exams are evaluated as per the common scheme provided by the affiliating university. The distribution of weightage / marks for each component is decided by the respective Board of Studies and approved by the Academic Council.
- Answer books evaluation of end semester exams is permitted for those faculty members who have completed two years of teaching.
- Introduction of OMR sheets in examination.
- Two mid semester examinations are conducted in each semester and best of two marks is considered.

**2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

A meeting of all HODs, Dean (Academic), Controller of Exam and Examination Superintendent with the Director before end semester examination is conducted regarding the smooth conduct/implementation of examination rules. Then the recommendations are implemented for the subsequent examinations and evaluations in conjunction with university norms. The results are analyzed and reviewed by the Examination Cell so as to plan and execute corrective actions, if any.

**2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

Formative Assessment of the students is assessed on the following parameters:

- Class interactions
- Group discussions/Viva-voce
- Presentations
- Assignments/Quiz
- Mid - Semester Tests
- Workshops/Seminars
- Vocational Training

Institute conducts a summative evaluation (End semester examination) at the

end of each semester through the following:

- Theory and practical exams
- Major/Minor Project work

Increasing transition ratio of students is observed by adopting this approach.

**2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.**

All the students are familiar about the transparency in internal assessment.

- Two mid semester examinations are conducted in each semester and best of two marks is considered.
- Academic performance is monitored by observing the students performance in the classrooms through class-tests, interactions, sessional tests and assignments.
- The Institute has setup an academic monitoring procedure in each department in consultation with the Director
- The regularity of the students is monitored by recording presence /absence in every class through the ERP system.
- The students and parents are communicated about the progress through mail, letter and in parent teacher meet.
- Parents and local guardians are invited to the college for the discussion of the necessary action to be implemented for the progress of the student.
- Communication skills are tested through report writings, presentations and group discussions.

**2.5.6 What are the graduate attributes specified by the college / affiliating university? How does the college ensure the attainment of these by the students?**

Following graduate attributes are specified by the college/affiliating university:

- Application of knowledge of mathematics, science, and engineering.
- Ability to design and conduct experiments, as well as to analyze and interpret data.
- Ability to design a system software, hardware component, or process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, manufacturability and sustainability.
- To function in multidisciplinary teams.

- To identify, formulates, and solves engineering problems,
- To understand professional and ethical responsibility.
- To communicate effectively.
- Understanding the impact of engineering solutions in a global, economic, environmental, and social context.
- Recognizing the need for and an ability to engage in life-long learning.
- To gain Programming knowledge and analytical thinking to encourage realistic approach.
- Developing adaptability for changing industrial, environment in terms of fast changing and latest emerging technologies.
- To demonstrate the ability to perform or work on engineering, technological and scientific projects.
- To participate and succeed in competitive examinations.

The college ensures the attainment of these by the students in following manner:

- Written tests, sessional test, attendance, presentations, industrial visits, assignments, independent learning and behavioral aspects.
- After evaluation of the assignments/tests/projects/ etc. the outcome results are discussed in the class, results are put on the notice board, students are individually counseled, feedback is taken from the students for better assessment, as well as improving the existing standards of assessment.
- There has been betterment in the quality of question papers and solutions devised for these papers.
- While evaluating students for internal assessment, transparency is maintained and due weightage is given for their behavioral attributes, independent learning and communication skills.

#### **2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?**

The subject teacher shows the evaluated copies of mid – semester examinations to the students in the class. Student can ask the teacher if he/she has any doubt in evaluation. The teacher clarifies doubts regarding evaluation. Internal marks are displayed on the notice board to enable discussion with the subject teacher/ Faculty Advisor and the HOD in the case of any disagreement.

Within stipulated days of the announcement of the end semester examination results, students can apply for revaluation/rechecking by filling a form through

the registrar of the college. If student is not satisfied with revaluation result, there is provision of spotvaluation after forwarding application from college directorfor speedy redressal of grievances.

## 2.6. Student performance and Learning Outcomes

### 2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Yes, the college has clearly stated learning outcomes mentioned in its Vision and Mission. These are made aware to students and staff as given below:

- Every department has well defined Programme Education Objectives (PEO). Further, they have clearly defined Programme outcomes (PO) and course outcomes (CO) and cross mapping has been done in between PEO, PO and CO. Moreover, evaluation of each PO and CO is done to check whether students have achieved them, and then use the results to make courses better.
- The faculty is made aware of the learning outcomes for each course which is clearly indicated in the curriculum provided to the students. If it is not indicated in the curriculum, faculty themselves will define learning outcomes.

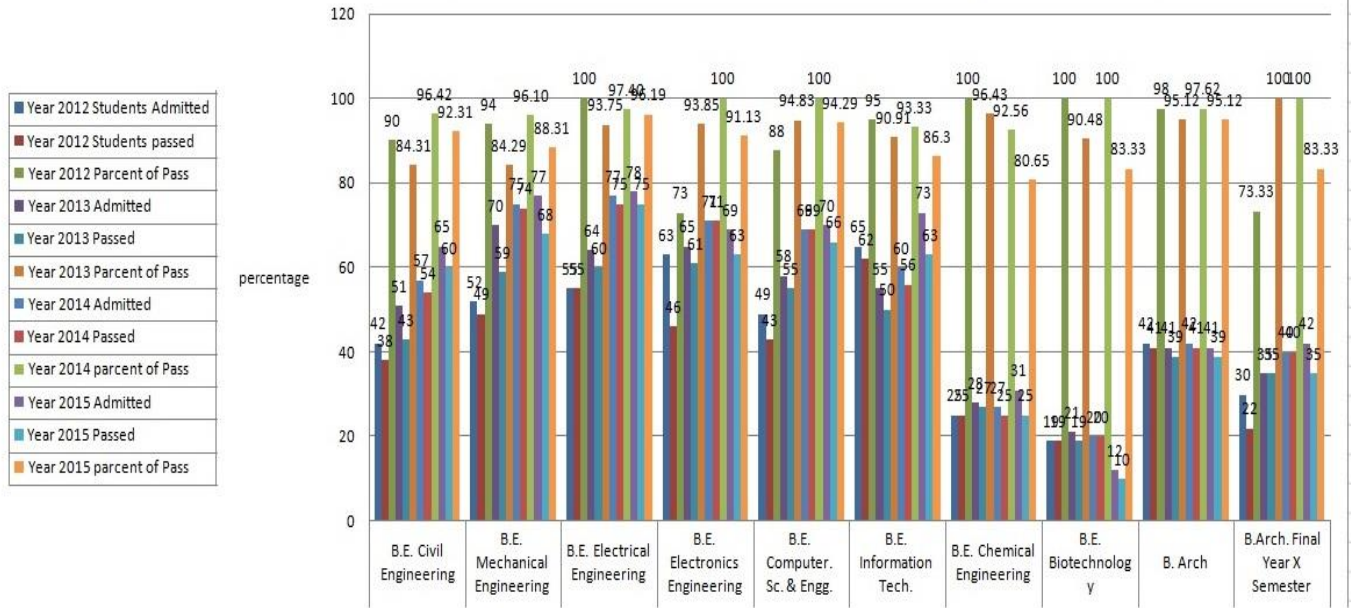
### 2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/Programme? Provide an analysis of the students' results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the Programmes/courses offered.

The institution monitors and communicates the progress and performance of students through the duration of course/ Programme by following manners:

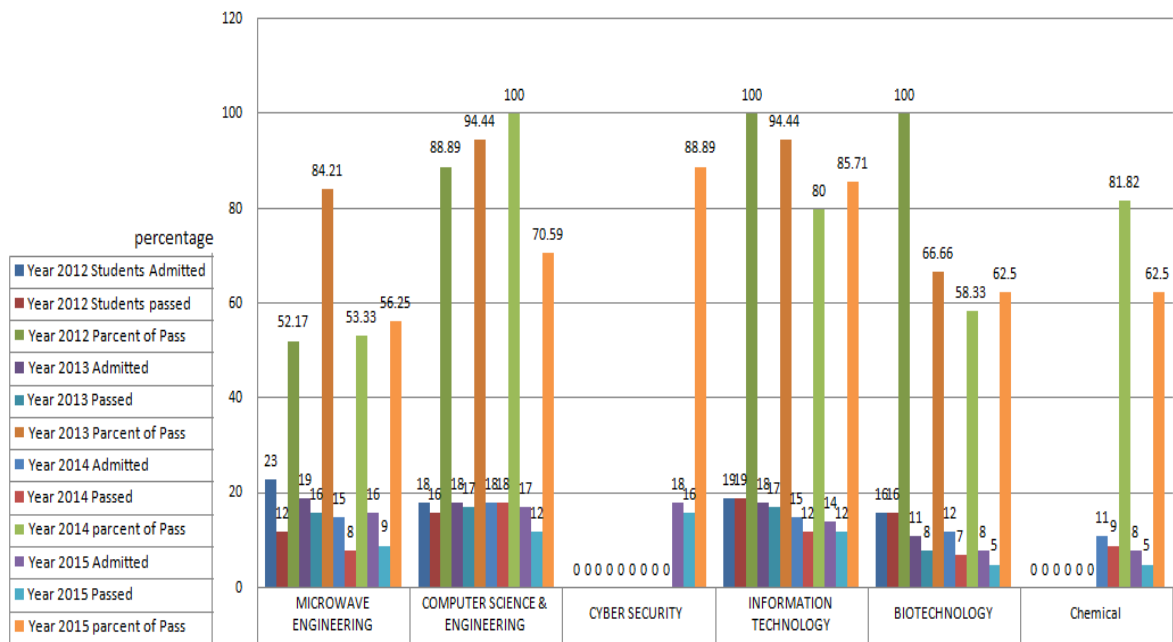
- The parents are informed regarding attendance shortage through SMS and letters.
- The students' performance is monitored by their respective class coordinator or faculty member.
- The answer books are shown to the students.
- The institution evaluates the students' performance through two mid semester tests of both objective and subjective type and assignments during the semester.

**Analysis Student result (Last four Year)(%)**

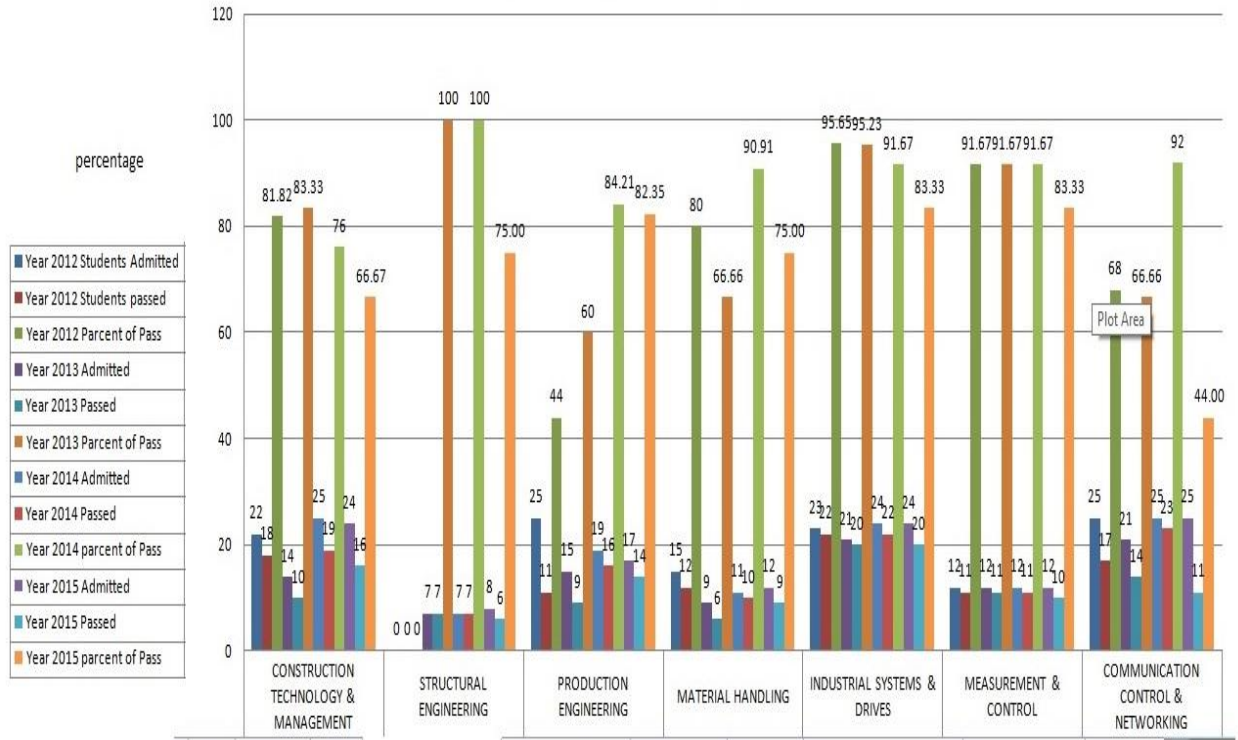
### Result Analysis of B.E. Fourth & B.Arch Fourth, Fifth Year (Last Four Years)



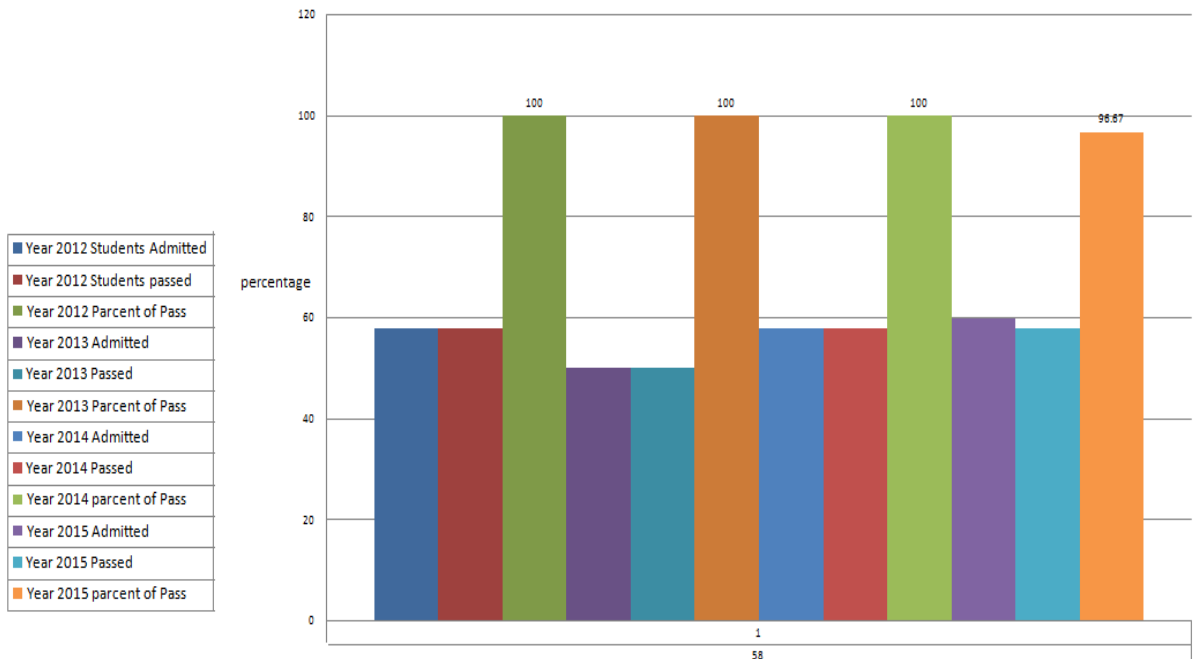
### Result Analysis of M. E./M.TECH.



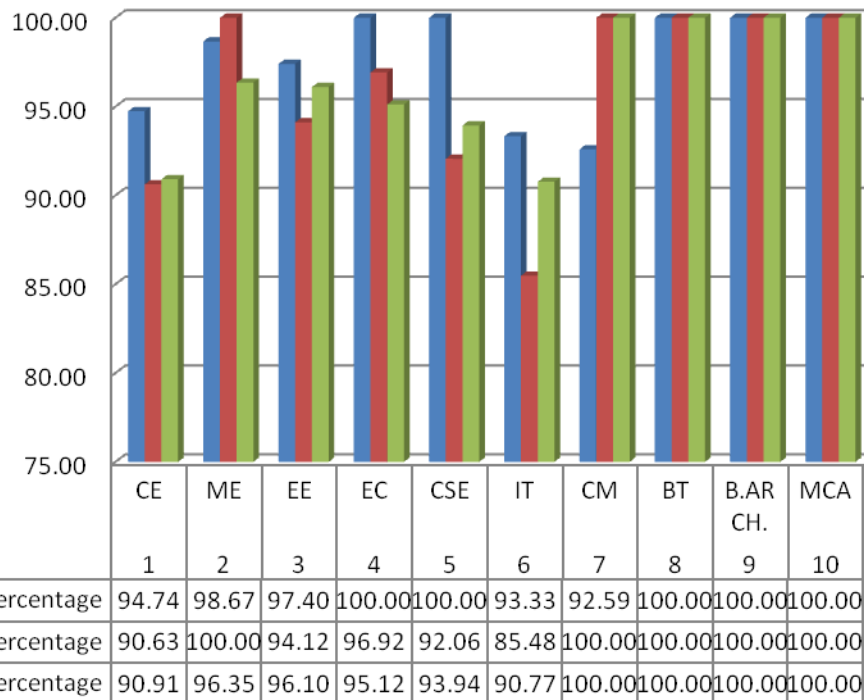
Result Analysis of M. E./M.TECH.



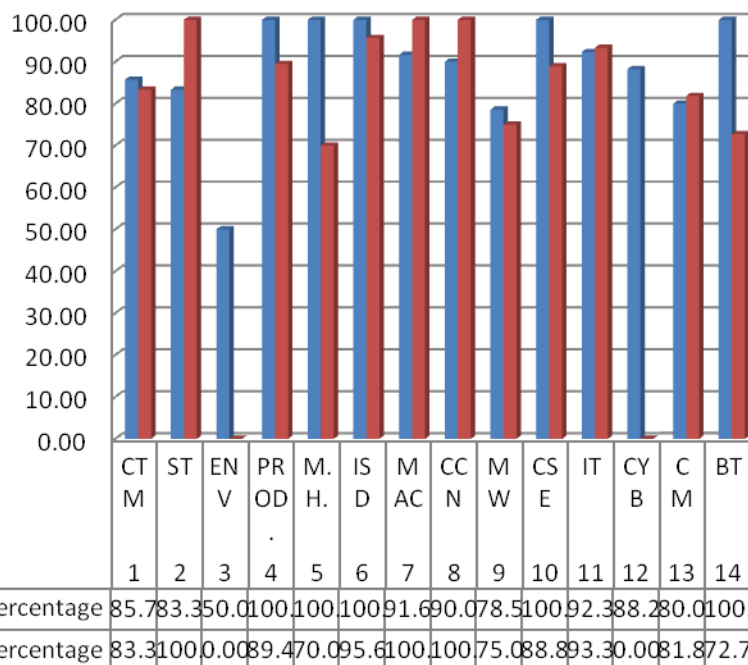
Result Analysis of MCA Final Year (Last Four Years)



## LAST THREE YEARS RESULT ANALYSIS REPORT



## RESULT ANALYSIS REPORT



**2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?**



The faculty is involved in creating the learning environment. The achievement of the intended learning outcomes, the strategies of teaching, learning and assessment of the institute are done as given below:

- The institution has a conducive learning environment. Slow learners and advance learners are identified and given remedial classes and special attention.
- A course file is prepared before the beginning of each semester which includes quality policy, quality objective, Programme education objective, syllabus, lesson plan, assignments, previous year question papers and hand-written notes.
- Classroom interactions help teachers to assess the learning outcome of that session.
- Expert lectures, workshops, seminars and conferences are conducted by every department for graduate and postgraduate students.
- The training and placement cell of the college nurtures the entrepreneurs skills of the students, and encourages student in public speaking and group discussions through Personality Development Programmes (PDP) and Campus Connect Programmes (CCP).

**2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?**

To enhance the social and economic relevance of the courses offered the measures/ initiatives taken by the institute are following-

- Entrepreneurship: To encourage the engineering students, through an Entrepreneurship Development Programme on Entrepreneurial Opportunities, are organized.
- Student Placement: To improve the student skills for getting quality jobs.
- Innovation: Participation in research projects, national seminars and conferences.
- Enhancement of research aptitude: Research advisory committee identifies the various fields of research and assigns the research topic to relevant department.
- Students are motivated through personality development and encouraged to participate in activities for social and community service.
- NSS: In the Institute, NSS implements the social issues such as tree-plantation, eradication of child labor and other issues in rural areas. Social activities are conducted through NSS.



- Training and Placement cell: The main objective of the placement cell is to place the students in reputed national and multi-national companies. This is achieved through campus selections conducted in the college for which the students are trained in aptitude, technical and soft skills, much ahead of campus selections. The cell believes in overall development of the students' personality, which will help them to achieve a rewarding career.

#### **2.6.5 How does the institution collect and analysis data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?**

Institution adopts the following methods to collect and analyze data on student learning outcome:

- Institution conducts mid semester tests, seminar presentations, class assignments etc to achieve the student learning outcome.
- Minor and Major Projects.
- Internal and external practical examinations/viva.

Institute has taken following steps to overcome the barriers:

- Minimum attendance limit for students and eligibility criterion is emphasized.
- After valuation, answer books are shown to the students to make them understand their strengths and weaknesses.
- Measures like remedial classes, assignments and extra classes are arranged for slow learners
- Feedback is taken from parents, alumni and experts from industry for further action.

#### **2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?**

Students learning outcome is monitored and ensured by adoption of following measures

- Keeping track of attendance of students
- Mid semester test, assignments are to be evaluated and results displayed on notice board which helps to follow understand the academic progress of the students
- The class coordinators keep important information like attendance, results, and assessment record and evaluation every semester.
- The slow learners are taken care of by class coordinator and they are advised to attend remedial classes.
- The college maintains a record of the marks scored by the students in the class tests, sessional tests and university exams.

**2.6.7 Does the institution and individual teachers use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.**

**Any other relevant information regarding teaching learning and evaluation which the college would like to include.**

Yes. The indicators used by institution and individual teachers to assess the student performance are:

- Students are assessed on the basis of their performance in the internal examinations and classroom/lab activity.
- Attendance of students
- Minor/Major project of students
- Seminar/ presentation for a specific topic
- Marks in Mid-Sem exam/ quiz/ assignment.

Institute adopts the modern tools for teaching and learning. The Institute has ERP dashboard to facilitate the fast communications among the stakeholders.

### **CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**

#### **3.1 Promotion of Research**

##### **3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?**

Yes, the Institute is Quality Improvement Program (QIP) centre funded by AICTE, Delhi and research centre of Rajiv Gandhi Proudyogiki Vishwavidhyalaya (RGPV), Bhopal.

##### **3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.**

Yes, there is a research committee at the institutional level to monitor and address the issues of research. Following are the members of the committee:

- Dr. P. K. Singhal, Professor, Department of Electronics
- Dr. M. K. Trivedi, Professor of Civil Engineering
- Dr. A. K. Wadhvani, Professor, Electrical Engineering Department
- Dr. S. Tiwari, Professor in Civil Engineering
- Dr. S. K. Jain, Professor of Civil Engineering

The recommendations of the committee are:

- Creation of facilities and infrastructure.
- Up gradation of faculty knowledge.
- To motivate and guide students.
- To provide opportunities to students and faculty for participation in National/International level contests.
- To send faculty for participation in National seminars and workshops.

##### **Impact:**

- More and more students are joining the research Programmes
- AICTE, New Delhi has given the status of QIP centre to the institute
- Good quality research papers are appearing in SCI journals
- Faculty members/research scholars are applying for patents.

##### **3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/ projects?**

- **Autonomy to the principal investigator**

The Principal Investigator is free to choose his area of research interest and submit the research proposal to different funding agencies for financial support.

- **Timely availability or release of resources**

The institute releases the resources as and when processed by the Principal Investigator for procurement of sanctioned items.

- **Adequate infrastructure and human resources**

The institute has well equipped laboratories and qualified technical staff in various departments to support the Principal Investigator for his analytical/experimental work.

- **Time-off, reduced teaching load, special leave etc. to teachers**

The Principal Investigator is given duty leave for presenting his work in Conferences/seminars. However, there is no provision for time-off or reduced teaching load to a Principal Investigator.

- **Support in terms of technology and information needs**

The institute has rich library subscribing reputed Journals. In addition, the institute has high speed broad-band internet connection available for faculty members.

- **Facilitate timely auditing and submission of utilization certificate to the funding authorities**

Statement of grants received and expenditure made for different grants is well maintained by Account Section of the Institute. The Account Section and Chartered Accountant of the Institute timely audit the grants and prepare the Utilization Certificate for submission to the funding agencies.

- **Any other**

The institute is a Quality Improvement Program (QIP) centre funded by AICTE, Delhi. Under this Program, faculty members of other institutes are registered as research scholars for their Ph.D Program. Such students, besides getting full salary from their parent institutes, also get QIP scholarship and contingency amount for the duration of three years. The centre also organizes short term courses, seminars/workshops, curriculum development workshops *etc.*

### **3.1.4. What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

The students are motivated to do research oriented projects/dissertations and present their work in conferences/seminars. A large number of papers is published every year in International Journals from the Project/Dissertation work of

students. Approximate number of papers published in Journals and conferences during last four years is as follows:

Year	2012-13	2013-14	2014-15	2015-16	2016-17
<b>Journals</b>	183	198	230	152	304
<b>Proceedings</b>	22	65	35	10	10

### 3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.

Following are the details of the faculty involvement in active research from various departments:

#### Electrical Engineering Department

S. No.	Name of the Schemes	Title of Project	Name of PI	Name of Co-PI	Grant Sanctioned
1.	DST	Setting up of Power Components and system simulation lab(FIST)	Professor & Head Elect. Engg. Deptt.	--	Rs. 38.00 Lac
2.	DST	Integrated FNN approach for voltage security assessment of MPSEB system	Dr. M. Pandit Professor	Dr.L.Srivastava Professor	Rs. 10.62 Lac
3.	AICTE (RPS)	Security Assessment of a Practical Power Network Employing soft Computing Techniques	Dr. M. Pandit Professor	Dr.L.Srivastava Professor	Rs. 5.75 Lac
4.	AICTE (RPS)	Soft computing technique for congestion management in restructured power system scenario	Dr.L.Srivastava Professor	Dr. M. Pandit Professor	Rs.10.0 Lac
5	AICTE (RPS)	Real Time Hansen (Leprosy) & Neuromuscular Disease Diagnostics	Dr.A.K.Wadhwani Professor	--	Rs. 14.60 lac
6	AICTE (RPS)	Analysis for fault Identification in rotating Electrical Machine	Prof.S. Wadhwani Associate Professor	-	Rs.7.06 Lac
7	AICTE (MODR OB)	Modernization of Measurement & Instrumentation Lab	Dr.A.K.Wadhwani Professor	-	Rs 8.00 Lac

8	AICTE (RPS)	Real Time Health Monitoring for Accurate Disease Diagnostics of Human Being	Dr.A.K.Wadhwani Professor	-	Rs. 6.40 Lac
9	UGC	Research award for PDF	Dr. M. Pandit Professor	-	Rs. 14.70 lac
10	AICTE (MODR OB)	Modernization of Electrical Machine Lab	Dr. S. Wadhwani Associate Professor	-	Rs. 11.0 lac
11	UGC	Analysis of Bio Electric Signals using Soft Computing Techniques	Dr.A.K.Wadhwani Professor	Dr.S.Wadhwani Associate Professor	Rs. 10.25 lac
12	AICTE (MODR OB)	Modernizations of High Voltage Testing Lab	Dr.A.K.Wadhwani Professor	--	Rs. 10.00 lac
13	DST	Integrated Security Assessment of Power system Using Distributed computing and its Enhancement	Dr. L. Srivastava Professor	Dr. M. Pandit Professor	Rs. 13.73 Lac
14	AICTE (RPS)	Indigenous database Creation of Bioelectric Signal and Disease Diagnosis Using Recent DSP Techniques	Dr.A.K.Wadhwani Professor	--	Rs. 7.00 lac
15	AICTE (RPS)	Intelligent Monitoring of Industrial Drive	Dr. S. Wadhwani Associate Professor	--	Rs 11.00 lac

### Mechanical Engineering Department

S. No	Name of Faculty	Name of student	Title	year	Ph.D/ M.Tech.
1	Dr. C. S. Malvi	Nitin Verma	Fabrication of screen printed solar cell	2013	Ph. D (Pursu.)
2	Dr. C. S. Malvi	Gurjeet Singh	Human power plant	2013	Ph. D (Pursu.)
3	Dr. C. S. Malvi	Rahul Pachoriya	Unconventional Machining	2014	Ph. D (Pursu.)
4	Dr. C. S. Malvi	Bhupendra Bhadouriya	Development of Solar Polycarbonate PVT panel	2011	M.Tech.
5	Dr. C. S. Malvi	Brijendra Gond	Solar water heating system with PCM	2011	M.Tech.
6	Dr. C. S. Malvi	Jitendra K Bhartiya	Development of cost effective polymer PV	2012	M.Tech.

			panel		
7	Dr. C. S. Malvi	Rahul Arya	Design of photovoltaic manufacturing plant	2014	M.Tech.
8	Dr. C. S. Malvi	Rajkumar Solanki	Simulation and fabrication of polymer solar hybrid panel	2013	M.Tech.
9	Dr. C. S. Malvi	Vinay Bhaskar	Diagnostic analysis of standalone Solar PV system	2015	M.Tech.
10	Dr. C. S. Malvi	Rakesh Joshi	Design and development of pedal power station	2013	M.Tech.
11	Dr. C. S. Malvi	P K Sahu	Analysis of dynamic coefficient of friction for plate	2007	M.Tech.
12	Dr. C. S. Malvi	R Tamilarasan	Optimization of the fuel analysis in a ideal automobile	2007	M.Tech.
13	Dr. C. S. Malvi	Ranjeet Singh	Hybrid Solar Car	2013	M.Tech.
14	Dr. C. S. Malvi	Richa Agarwal	Design and development of Paper Recycling Plant	2015	M.Tech.
15	Dr. C. S. Malvi	Sunil Dohare	Fabrication and design analysis of paper recycling plant	2015	M.Tech.
16	Dr. C. S. Malvi	Anil Singh Tomar	Innovative leveraged propelled Disable utility chair	2015	M.Tech.
17	Dr. C. S. Malvi	Pratishtha Sharma	Parametric Optimization of MRR in Manual Air Plasma Arc Cutting of AISI 1017 MS using Design of Experiment	2015	M.Tech.
18	Dr. Pratesh Jayaswal	Pavan Agarwal	Vibration Based Monitoring and Analysis for fault Diagnosis	2012	Ph. D (Pursu.)
19	Dr. Pratesh Jayaswal	Surendra Kumar Agarwal	Energy and exergy analyses of a new solar assisted cogeneration cycle for simultaneous heating and triple effect cooling	2014	Ph. D (Pursu.)

			applications		
20	Dr. Pratesh Jayaswal	Pankaj Sharma	Investigation on wear rate in IC engines	2012	M.Tech.
21	Dr. Pratesh Jayaswal	Kamlesh Kushwah	Fuzzy Logic approach for decision making in Material Handling	2012	M.Tech.
22	Dr. Pratesh Jayaswal	Hemant Singh Rajput	Industrial Automation	2012	M.Tech.
23	Dr. Pratesh Jayaswal	Anshul Sahu	MCDM project in Industries	2012	M.Tech.
24	Dr. Pratesh Jayaswal	Sawan	Design and Development of Lubricating oil testing Machine	2012	M.Tech.
25	Dr. Pratesh Jayaswal	Umesh Kumar Prajapati	Production Flow Lines Implementation	2012	M.Tech.
26	Dr. Pratesh Jayaswal	Manish Kumar	Feature Extraction Method for axial Piston pump fault diagnosis based on EMD and ARX Model.	2013	M.Tech.
27	Dr. Pratesh Jayaswal	Arvind Yadav	Fatigue failure analysis of a Helical Gear	2013	M.Tech.
28	Dr. Pratesh Jayaswal	Raghvendra Singh Gurger	Determination of Rolling Element Fatigue life from Computer generated Bearing Tests.	2013	M.Tech.
29	Dr. Pratesh Jayaswal	Anand Parashar	Implementation of Automated Material Handling System	2013	M.Tech.
30	Dr. Pratesh Jayaswal	Vaibhav Singh Rathore	Failure analysis of spur and Helical Gears used in gear box of automobile	2014	M.Tech.
31	Dr. Pratesh Jayaswal	Mayank Srivastava	Condition Based Maintenance of CNC turning Machine	2014	M.Tech.
32	Dr. Pratesh Jayaswal	Shilpa Sharma	Operation and maintenance of stacker cum re-clamer in coal handling plant	2015	M.Tech.
33	Dr. M. K. Gaur	Gaurav Saxena	Solar green house	2014-	Ph. D



			technology	2015	(Pursu.)
34	Dr. M. K. Gaur	D. Singh	Solar Refrigerator	2013-2014	Ph. D (Pursu.)
35	Dr. M. K. Gaur	Vivek Nanda	Total productive maintenance -A case study on jamuna auto industry	2011	M.Tech.
36	Dr. M. K. Gaur	Akanksha Kumra	Study and design of PV system for small scale cottage industry at Gwalior	2013	M.Tech.
37	Dr. M. K. Gaur	Om 77rakash Mishra	Two stage filtration system in full scale boiling water for thermal power plant	2013	M.Tech.
38	Dr. M. K. Gaur	Shashank Saxena	Design of PV system for a biscuit packaging making - A small scale industry	2013	M.Tech.
39	Dr. M. K. Gaur	Awadesh Ahirwar	Strategic analysis for reliability of diesel locomotive in Indian railway	2013	M.Tech.
40	Dr. M. K. Gaur	Jasveer Singh	Optimization of EDM process based on the Taguchi method	2014	M.Tech.
41	Dr. M. K. Gaur	Lalit Kumar Gaur	Design and analysis of scram jet combustor with pylon injector by CFD	2014	M.Tech.
42	Dr. M. K. Gaur	Saurabh Agrawal	Optimization of machining parameters of a hard porcelain material and CNC turning machine using Taguchi and RSM	2015	M.Tech.
43	Dr. A.K.Sharma	Arvind Kumar Singh	Free vibration analysis of laminated composite plates using FEM	2011	M.Tech.
44	Dr. A.K.Sharma	Yogesh Borse	Finite Element Analysis of Pressure Vessel Fitted with nozzle and saddle	2012	M.Tech.

			supports		
45	Dr. A.K.Sharma	Ashish kumar shrivastava	Dynamic analysis of double toggle jaw crusher	2012	M.Tech.
46	Dr. A.K.Sharma	Balendra Bhaskar	A Fuzzy logic approach in three stage selection of manufacturing process using Matlab	2012	M.Tech.
47	Dr. A.K.Sharma	Kuldeep kaushik	Modeling and finite element analysis of structures with bolted, riveted and welded connections	2013	M.Tech.
48	Dr. A.K.Sharma	Arun Singh	Characterization of aluminium metal matrix composite with SiC and B4C reinforcement with different weight percentage	2015	M.Tech.
49	Dr. A.K.Sharma	Gaurav sharma	Optimization of machining parameter on rail wheel profiling using GRA coupled with Topsis approach	2015	M.Tech.
50	Dr. A.K.Sharma	Devesh P. Singh	Vibration analysis of stiffened plates using FEM	2015	M.Tech.
51	Jyoti Vimal	Vikas Agrawal (PN09017)	Optimization of extrusion blow molding process parameters by grey relational analysis and Taguchi method	2011	M.Tech.
52	Jyoti Vimal	Ashutosh Kumar Pandey	Implementation of TOPSIS method for multi criteria decision making in supplier selection	2012	M.Tech.
53	Jyoti Vimal	Vivek Singh (PN10018)	Study of automotive & industrial tribology along with tyre wear analysis	2012	M.Tech.

54	Jyoti Vimal	Bhawna Bistt (PN10005)	Optimization of electrochemical machining of steel and aluminium work piece using GRA method	2012	M.Tech.
55	Jyoti Vimal	Atul Shanker Suman (PN11003)	Failure analysis of the luffing jib mobile tower crane using solid works-12 software	2013	M.Tech.
56	Jyoti Vimal	Abhinav Shukla (PN09001)	Optimization of plant layout using work study method: A case study of steel manufacturing plant	2014	M.Tech.
57	Jyoti Vimal	Harsh Bhardwaj	Study of free vibration analysis of laminated composite plates with cutouts	2014	M.Tech.
58	Jyoti Vimal	Pushpendra Kushwaha	free vibration analysis of laminated composite with different B.C.	2014	M.Tech.
59	Jyoti Vimal	Ashish Soni	Comparative study of process variable pressure and axial displacement for hydro formable process of tabular billet	2014	M.Tech.
60	Vedansh Chaturvedi	Rahul Pachoriya (PN09013)	Electrochemical machining using rotational work piece with different shape of electrode	2011	M.Tech.
61	Vedansh Chaturvedi	Anil Choubey (MH10002)	Optimization of CNC milling machine process parameters using ANOVA and signal to noise ratio methodology	2012	M.Tech.
62	Vedansh Chaturvedi	Ravendra Singh (MH10022)	Investigation of optimal process parameters of	2012	M.Tech.

			carburized mild steel		
63	Vedansh Chaturvedi	Leeladhar Nagdeve	Investigation of optimal processing condition of AWJM using ANOVA analysis	2012	M.Tech.
64	Vedansh Chaturvedi	Bijendra Diwakar (PN10007)	Parametric optimization of CNC wire cut EDM using taguchi and GRA method	2012	M.Tech.
65	Vedansh Chaturvedi	Yogendra Tyagi (MH10020)	Parametric optimization of process parameters of drilling process parameters using MCDM approach	2012	M.Tech.
66	Vedansh Chaturvedi	D. M. Arya (PN11007)	Parametric optimization of MIG process Parameters using Taguchi method	2013	M.Tech.
67	Vedansh Chaturvedi	Dheeraj Singh (PN11006)	Investigation of optimal processing condition of TIG process Parameters using Taguchi method	2013	M.Tech.
68	Vedansh Chaturvedi	Prashant Goyal (PN09011)	Optimization of extrusion blow molding process parameters for HDPE material by MCDM approach.	2014	M.Tech.
69	Vedansh Chaturvedi	Diksha Singh (PN12006)	Multi-response optimization of AWJM of stainless steel AISI 304 using VIKOR Method	2014	M.Tech.
70	Vedansh Chaturvedi	Amit Sharma (0901ME13MT02)	Optimization of Process Parameters of Two Way Abrasive Flow Machining by Grey Relational Analysis Coupled with Principle Component	2015	M.Tech.

			Analysis		
71	Vedansh Chaturvedi	Raj Kumar Sharma	Multi-response Optimization of Process Parameter of Spark Erosion Electric Discharge Machining Using Principal Component Analysis Coupled with TOPSIS	2015	M.Tech.
72	Sharad Agrawal	Amrita Singh	Optimized selection of R-14 tyre based on new integrated approach	2012	M.Tech.
73	Sharad Agrawal	Shankar Sharan Vajpai	Optimization of multi quality characteristic in textile machine by using GRA based fuzzy approach	2012	M.Tech.
74	Dinesh K Kasdekar	Annant Dhawan	Optimization of factory layout of rail spring factory	2009	M.Tech.
75	Dinesh KKasdekar	Nikhil Singh Chouhan	Evaluating the best belt conveyor assembly using TOPSIS approach	2012	M.Tech

### Applied Science Department

S. No.	Name of the Schemes	Title of Project	Name of PI	Name of Co-PI	Grant Sanctioned
1.	AICTE	Investigation and data analysis of electric field variation and lightning activities using electric field monitoring system)	Dr Sourabh Bhattacharya	--	Rs. 7.25 Lac
2.	MPCST	Studies on removal of dyes from industrial effluents using eco-friendly non-conventional biosorbent	Dr. Anjula Gaur	-	Rs. 4.28 Lac

### Computer Science Engineering

Nature of the project	Name of the Funding Agency	Title of the Project	Name of P.I. / Co-PI	Total Grant Sanctioned
Minor Projects	AICTE (Under RPS Scheme)	Development of Flexible Framework For Mining Association Rules	Dr. R. K. Gupta  Dr. Akhilesh Tiwari	Rs. 5.00 lac
Major Projects	Department of Science and Technology (DST), Govt. of India	An Efficient Multimodal Identification System with Reduced Recognition Time	Dr. R. K. Gupta	Rs. 29.952 lac
Any Other MODROB	AICTE (Under MODROB Scheme)	MODROB	Dr. R. K. Gupta	Rs. 5.00 lac

### ELECTRONICS DEPARTMENT

S. No.	Name of the funding agency	Name of the faculty	Project Title	Year of Funding	Duration	Amount sanctioned (Rs.)
1.	IEI	Dr. L. Shrivastava	Congestion Control in Ad hoc Networks	2009-2012	3 years	0.5 lacs
2.	MODROB	Dr. P.K. Singhal	Up gradation of Microwave & Antenna lab	2012-2015	2 years	5.5 lacs
3.	AICTE	Dr. Rekha Gupta	Spectrum Sensing for Cognitive radio applications	2012-2014	2 years	6.6 lacs

**3.1.6 Give details of workshops/ training Programmes/ sensitization Programmes conducted/organized by the institution with focus on capacity building in terms of research and imbining research culture among the staff and students.**

Following list provides details of Conferences/Seminars, FDPs and other activities conducted/ organized by the institution with focus on capacity building in terms of research and imbining research culture among the staff and students:

Name of the STTP/ Conference/Workshop	Sponsored by	Year
Evolutionary computing techniques for numerical and engineering optimization	AICTE	2011
Engineering Thermodynamics	MHRD	2012
Aakash for Education	MHRD	2012
Research Methodology	TEQIP-II	2013
Engineering Mechanics	MHRD	2013
Pedagogical Approach in Technical Education	TEQIP-II	2014
Hybrid Solar PVT Technologies	TEQIP-II	2014
Teaching & Research Methodology	AICTE	2014
Renewable Energy based Power Generation: Options and Challenges	TEQIP-II	2013
Innovations in Electrical Engineering	TEQIP-II	2014
Innovations in Electrical Engineering	TEQIP-II	2015
Software tools for Industrial Drives & Instruments	TEQIP-II	2015
Nature Inspired Optimization Techniques for Engineering Applications	TEQIP-II	2013
Simulation of Power Electronics Converters	TEQIP-II	2014
Application of MATLAB in Electrical Engineering	TEQIP-II	2015
National Seminar on Infrastructure Management Challenges and Advancements	AICTE	2011
Green Building for Sustainable Development	TEQIP-II	2015
Engineering Trends in Materials for Engineering Applications	TEQIP-II	2014
Advanced in Mathematical Applications for Engineering & Technology	TEQIP-II	2014
Chemistry for Life	TEQIP-II	2015

Software Foundation Level (Basic)	IBM India Pvt. Ltd	2013
Advances in Information and Communication Technology	AICTE	2013
Cloud Computing	TEQIP-II	2014
Android Programmemeing	TEQIP-II	2014
Computer Programmemeing	MHRD	2014
Cyber Security	MHRD	2014
Advances in Information and Communication Technology	TEQIP-II	2015
Introduction to Design of Algorithms	MHRD	2015
Advances in Chemical Engineering	TEQIP-II	2013
Computational Fluid Dynamics	TEQIP-II	2014
Recent trends in Digital Signal Processing Applications	TEQIP-II	2013
Emerging Trends in Communication, Control and Networking	TEQIP-II	2014
Signal and Systems	ISTE	2014
Recent Advances in Microwave Engineering	TEQIP-II	2015
Recent Advances in Microwave Engineering	AICTE	2015
National Workshop on Research Methodology	TEQIP-II	2016
National Conference on Advances in information & Communication Technology (NCAICT)-2016	TEQIP-II	2016
Workshop on Cyber World and its Related Crime	TEQIP-II	2016
Seminar on recent trends in Waste Water Treatment	TEQIP-II	2016
Faculty Development Programme on Advanced Techniques in Signal Processing and Communication	TEQIP-II	2016
STTP on Recent advances in Electrical Engineering	TEQIP-II	2016
One day Symposium on Novel and smart Materials & Devices: Paradigm for Fabrication & Characterization	TEQIP-II	2016
National Seminar on Renewable Energy and Microgrid	TEQIP-II	2016



National Conference on Innovations in Electrical Engineering	TEQIP-II	2016
Workshop on Finite Element method for Engineers	TEQIP-II	2016
One Day National workshop on “Renewable Energy: Opportunities & Challenges”	TEQIP-II	2016
4 <sup>th</sup> National Conference on “Innovation in Electrical Engineering”	TEQIP-II	2016
One day workshop on Green building for sustainable development	TEQIP-II	2016
Two day workshop on Recent Advantages in Microwave Engineering	TEQIP-II	2016
One day seminar on Recent Advances in Electronics engineering	TEQIP-II	2016
One day National Conference on Recent Trends in Microwave Engineering	TEQIP-II	2016
Two days national Workshop on Manufacturing Systems	TEQIP-II	2016
Two days national Workshop on Quality in Technical Education: A Challenge	TEQIP-II	2016
National Workshop on Research Methodology	TEQIP-II	2016
National Conference on Advances in information & Communication Technology (NCAICT)-2016	TEQIP-II	2016
Workshop on Cyber World and its Related Crime	TEQIP-II	2016
Seminar on recent trends in Waste Water Treatment	TEQIP-II	2016
Faculty Development Programme on Advanced Techniques in Signal Processing and Communication	TEQIP-II	2016
Environmental Engineering & Practices	AICTE	2016
Green building and sustainable development	AICTE	2016
Gesture Robotics	TEQIP-II	28-29 March 2017

Innovative Trends in Computing	TEQIP	21-25 March 2017
Prospects of Entrepreneurship and Skill Development	TEQIP	27 March. 2017
App Development (iOS/Android)	TEQIP	10 March. 2017
Recent Advances in Electronics and Communication Engg.	TEQIP	4-5 March 2017
Current Practicws in Road Construction	TEQIP	03 March. 2017
Recent trends in modeling and Computational Techniques in Science and Engineering	TEQIP	28 Feb. -10 March 2017
Advances in Manufacturing Systems	TEQIP	16-22 Feb. 2017
Cyber Forensics Tools and Techniques	TEQIP	18 Feb. 2017
Recent Advances in Communication Engineering	TEQIP	17 Feb. 2017
Solar and wind power Technology	TEQIP	15 Feb. 2017
Innovation of Electrical Engineering	TEQIP	14 Feb. 2017
Intellectual Property Right and Patents	TEQIP	4 Feb. 2017
Smart Grid Technology	TEQIP	6 Feb. 2017

**3.1.7 Provide details of prioritized research areas and the expertise available with the institution.**

Following are the details (Department) of prioritized research areas and the expertise available with the institution.

**Mechanical Engineering Department**

S.No.	Name of Faculty	Area of Research
1	Dr. C. S. Malvi	Industrial Design, Solar Energy
2	Dr. Pratesh Jayaswal	Tribology and Maintenance
3	Dr. Manoj Kumar Gaur	Solar Thermal
4	Dr. Manish Sagar	Supply Chain Management

5	Prof. R. P. Kori	Metallurgical Engineering
6	Dr. Avadesh Ku. Sharma	Machine Design, Vibration
7	Prof. Vedansh Chaturvedi	Unconventional machine, optimization
8	Prof. Jyoti Vimal	CAD, Vibration , FEM, Materials, Optimization
9	Prof. Dinesh Kasdekar	CIM, Production engineering
10	Prof. Sharad Agrawal	CAD/ CAM
11	Prof. Vaibhav Shivhare	Mechanics of material, Vibration
12	Prof. Amit Aherwar	Tribology, Advanced Machining , Optimization, Composite
13	Prof. Bhupendra Pandey	Thermal, Automobile

### Electrical Engineering Department

S.No.	Faculty Name	Research Area
1.	Dr. Manjaree Pandit	Evolutionary optimization techniques for Power System optimization
2.	Dr. Laxmi Srivastava	Soft Computing and AI Applications to Power System
3.	Dr. Arun Kumar Wadhvani	Application of Soft Computing Techniques in Biomedical signals
4.	Ashish Patra	Control System and Electrical Machines
5.	Dr. Sulochana Wadhvani	Conditioning Monitoring of Rotating Electrical Machines.
6.	Hari Mohan Dubey	Industrial systems and drives
7.	Dr .Shishir Dixit	Heavy Elect. Equipment ,Power System and Facts Devices
8.	Rakesh Narvey	Industrial Systems & Drives, High Voltage Engineering
9.	Himmat Singh Ahirwar	Machine Drives
10.	Vijay Bhuria	Heavy Electrical Engineering
11.	Kuldeep Kumar Swarnkar	Economic Load dispatch
12.	Praveen Bansal	Multilevel Inverters
13.	Vishal Chaudhary	Power System
14.	Vijay Kumar Tewari	DC-DC Power Electronic Converters.

### Applied Science Department

S.No.	Faculty Name	Research Area
1.	Dr. Abhay Mishra	Digital communication nanotechnology
2.	Dr. V.P. Shinde	Queuing Theory
3.	Dr. D.K. Jain	Special Function

4.	Dr. Anjula Gaur	Organic Chemistry
5.	Dr. Shourabh Bhattacharua	Atmospheric Science
6.	Prof Jitendra Kumar	Queuing Theory
7.	Prof Angad Ojha	Epidemiology
8.	Dr Preeti Gupta	Organic Chemistry
9.	Dr Mamta Sharma	Operation Research
10.	Dr. Pooja Sharma	Organic Chemistry
11.	Prof Shweta Shrivastava	Special Function
12.	Prof Anil Shukla	Special Function
13.	Prof D K Mishra	Operation Research

### BIOTECHNOLOGY

S.NO	NAME OF THE FACULTY	RESEARCH AREA/ PROJECT
1	Dr. Sunita Sharma	Molecular Biology , Toxicology, Environmental Biotechnology
2	Prof Hotam Singh Chaudhary	Industrial Microbiology and food microbiology
3	Prof Rahul Anand	Molecular Modeling
4	Prof Savita Gupta	Molecular Biology, Immunotechnology
5	Prof Sarika Saxena	Molecular Biology , Toxicology, Plant Biotech
6	Prof Vinod Kumar Jatav	Bioinformatics
7.	Prof. Shilpi Gupta	Enzyme Technology, Molecular biology

### CHEMICAL ENGINEERING

S.NO	NAME OF THE FACULTY	RESEARCH AREA/ PROJECT
1	Dr. Shriram Prasad	Computational Fluid Dynamics, Fuel Technology
2	Prof. S. S. Trivedia	Molecular simulation
3	Prof. Swati Gupta	Process Control, Chemical Reaction Engineering
4	Prof. Anish P. Jacob	Reaction Engineering, Microfluidics, Catalysis
5	Prof. Shivangi Sharma	Process Intensification
6	Prof. Harendra Rathore	Membrane Separation, Mathematical Modeling, Waste Water Treatment
7	Prof. Krishan Kumar Pathak	Modeling & Simulation

### ELECTRONICS ENGINEERING

S.No	Expertise faculty	Prioritized research area
1.	Dr. P.K. Singhal Dr. Bimal Garg Dr. Vandana Vikas Thakare	Microwave Engineering
2.	Dr. Sarita Singh Bhadauria Dr Laxmi Shrivastav	Ad-hoc Networks
3	Dr Rekha Gupta Dr Karuna Markam Prof. Pooja Sahoo	Communication Engineering
4	Dr R P Narwaria	Bio Signal processing
5	Prof. Madhav Singh	VLSI Designing
6	Prof. Deep Kishore Parsediya	Mechatronics
7	Prof. Deep Sharma	Image Processing
8	Prof. Teena Soni	Surface Acoustic Wave Sensors, VLSI
9	Prof. Abhilasha Sharma	Microprocessor & Embedded Systems
10	Prof. Nandkishore Joshi	Digital Communication
11	Prof. Namrata Agrawal	EM Radiation Waves

### CS/IT DEPARTMENT

S.No	Expertise faculty	Prioritized research area
1	Dr. R. K. Gupta	Data Mining
2	Dr. Akhilesh Tiwari	Data Mining, Terrorist Network mining
3	Prof. Manish Dixit	Image Processing, Artificial Intelligent
4	Prof. Khusboo Agrawal	Adhoc Network
5	Prof. Punit Kumar Johari	Computer vision, Parallel Processing
6	Dr. Sanjeev Sharma	Data mining, computer network, Information Security
7	Prof. Vikas Sejwar	Computer Network
8	Prof. Abhilash Sonkar	Information Security, Computer Network
9	Prof. Jaimala Jha	Information Security
10	Prof. Jamvant Kumare	Image Processing, Spatial Information
11	Prof. Rajeev Singh	Software Engineering, Image Processing
12	Prof. Neha Bharadwaj	Information Security
13	Prof. Mahesh Parmar	Computer Network, Image Processing
14	Prof. R.R.S. Makwana	Algorithm Design, Network Security
15	Prof. Amit Kumar	Data Mining

### CIVIL ENGINEERING

S.No.	Name of faculty	Area of research
1	Dr. R. Kansal	Construction Management
2	Dr. M.K.Trivedi	Water Resources, Construction Management, Transportation
3	Dr. S.K. Jain	Structural Engineering

4	Prof. Archana Tiwari	Structural Engineering
5	Prof. D. Rastogi	Environmental Engineering
6	Prof. A.K. Dwivedi	Construction Management
7	Prof. A.K. Saxena	Environmental Engineering
8	Dr. Sanjay Tiwari	Structural Engineering
9	Prof. Gautam Bhadoria	Construction Management
10	Prof. Aditya K. Agarwal	Environmental Engineering

### COMPUTER APPLICATIONS

S.No.	Name of Faculty	Area of Research
1.	Dr. R. S. Jadon	Video Data Processing, Computer Vision, Image Processing, Soft Computing
2.	Dr. Anshu Chaturvedi	Adhoc Networks, Wireless Sensor Networks, Data Mining,
3.	Prof. P. Sharma	Cognitive Radio
4.	Prof. Parul Saxena	Video Processing, Soft Computing
5.	Prof. Devendra Dellwar	-
6.	Prof. Sunil Upadhaya	-

### 3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?

Following are the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students:

- Through guest Lectures
- Through organizing Faculty Development Program  
Through conferences
- Through workshops
- Through inaugural ceremonies of various centres of excellence within the institute.

#### Expert Lecturs Under TEQIP-II

Sr. No.	Name of Expert	Venue	Title	Date	Department
1	Dr. S.P. Tiwari	Professor IIT BHU	Advance Manufacturing System	27 March. 2017	Mechanical
2	Dr. Sanjay Kumar	Center for stem Cell research Christian Medical College, Vellore	Mesenchyme Stem Cell Based Therapeutic approach	25 March. 2017	Biotech
3	Dr. M.M. Pandey	Retd. Professor	Advance Bridge Engineering for Civil Engineering	25-31 March 2017	Civil

4	Dr. Kunal Pal	Department of Biotechnology and Medical EngineeringNIT Rourkela Odisha	Biomaterials	25 March. 2017	Biotech
5	Dr. C.S. Glkhale	Dean School of construciton management , NICMAR	Constructional Technology & Management Structural Engg.	25 March. 2017	Civil
6	Dr. D.M. Tripathi	Professor IIT BHU	Environmental Engineering	16-17 March 2017	Civil
7	Prof Rama Murthy	IIT Hyderabad	-	08-09 March 2017	CSE/IT
8	Prof. Shiv Prasad	IIT Roorkee	-	04 March. 2017	CSE/IT
9	Mr. Aslam Sher Khan	J.K. Tyre	Chemical Engineering	03 March. 2017	Chemical
10	Prof. Tanmoy Som	IIT BHU	-	01 March. 2017	CSE/IT
11	Dr. Ranjit Prasad Bahadur	IIT Khadagpur	Geomics	23-Feb-17	Biotech
12	Dr. Indranil Bajerjee	NIT Rourkela	Tissue Engineering	20 Feb. 2017	Biotech
13	Dr. Musti Sastry	University of West Indies	Internet of Things	19 Feb. 2017	EDC Cell
14	Dr. M.M. Pandey	Retd. Professor	Structural Engg.	12-22 Feb. 2017	Civil
15	Dr. Ambresh Singh	CEO Govindraj Projet Pvt. Ltd.	-	30-Jan-17	Electrical
16	Dr. K.B. Mishra	IIT Roorkee	Computational Fluid Dynamics	27-Jan-17	Mechanical
17	Dr. Suvijna Awasthi	SOS Jiwaji university	Interpesonal Skills	24-Jan-17	Electronics
18	Dr. Abhishek Asthana	Director of Hallam Energy Hallam University UK	Air Conditioning sizing and calculations	13-Jan-17	Mechanical
19	Dr. Rakesh Singhai	RGPV Bhopal	Electronics engg.	11 Nov. 2016	Electroics
20	Dr. Bijaya Ketan Sarangi	NEERI Nagpur	Biotechnology	23 Oct. 2016	Biotech
21	Dr. Anit Haritash	DTU New Delhi	Role of Biotechnology in Environment Management	22 Oct. 2016	Biotech
22	Dr. D.K. Shristava	BIET Jhansi	Non Convectional Energy Conventional sources	18 Oct. 2016	Electrical
23	Mr. Sourabh Choudhary	OIST Delhi	Expert talk of BE students	24 Sept. 2016	Electronics

24	Dr. D.N. Yadav	BHEL Jhansi	Transformer testing/design	16 Sept. 2016	Electrical
25	Dr. M.M. Pandey	Retd. Professor	Expert talk to BE students	29 Aug. 2016	Civil
26	Dr. Kishore Shende	Barkatullah University Bhopal	Bioinformatics and its applicaitons	12 Aug. 2016	Biotech
27	Dr. Manoj Kumar	AIIMS New Delhi	Bioinformatics and its applicaitons	11 Aug. 2016	Biotech
28	Dr. Dwijesh C. Mishra	ISARI New Delhi	Bioinformatics and its applicaitons	11 Aug. 2016	Biotech
29	Prof. R.K. Dhakad	DRDE Gwalior	Bioinformatics and its applicaitons	10 Aug. 2016	Biotech
30	Dr. Gitanjali Yadav	NIPGR Delhi	Bioinformatics and its applicaitons	9 Aug. 2016	Biotech
31	Dr. Punit Kaur	AIIMS New Delhi	Bioinformatics and its applicaitons	9 Aug. 2016	Biotech
32	Dr. Ajit kumar	MDU Rohtak	Bioinformatics and its applicaitons	8 Aug. 2016	Biotech
33	Dr. Chakresh Jain	Jaypee Institute Noida	Bioinformatics and its applicaitons	8 Aug. 2016	Biotech
34	Dr. R.K. Shevgaonkar		Challenges to become world class technical institute in present Scenario	29-Feb-16	
35	Dr. Kailash Wasewar	VNIT Nagpur	Component of Research Paper	27 Feb. 2016	
36	Mr. Amit N Phakade	SKF India	Finishing course	9-11 Feb. 2016	Mechanical
37	Mr. Amit N Phakade	SKF India	Finishing course	19-20 Jan. 2016	Mechanical
38	Er. R.K. Mahapatra	Bhel Jhansi	Modern Drives in indian Railway	30 Sept. 2015	Electrical
39	Er. Girraj Goyal		Pre Engineered building structure: An overview	28 Sept. 2015	Civil
40	Mr. Satish Chandra Mangal	NTPC Ltd.	Net metering the solar power generation innovative methodology	15 Sept. 2015	Mechanical
41	Dr. R.K. Dwivedi	MANIT Bhopal	Advances in manufacturing technologies	22 Aug. 2015	Mechanical
42	Prof. Piyush Shukla	AMI New Delhi	Computation biology in convergence to microbiology	07-Apr-15	Biotech
43	Mr. Gopal krishna Pharlia	NHPC Delhi	Design of energy efficient smart electrical grids	12-Mar-15	Electrical
44	Er. Sharath Nair	Crompton Greaves Ltd. Malanpur	Construction of drives motors and transformers	04-Mar-15	Electrical
45	Dr. Tarun Shakar	Andtriz Hydro power ltd. Mandideep	Design and engineering of hydro electrical generator	28 Feb. 2015	Electrical



46	Dr. Pankaj Swarankar	MANIT Bhopal	Automatic PID Controller & Tuning	24 Feb. 2015	Electrical
47	Er. Rahul Shrivastava	MANIT Bhopal	Molecular Modelling & Drug Designing	30-Jan-15	Biotech
48	Dr. Vijay Parmar	Leeds University	What is financial engg. And mathematical engg.	24-Jan-15	Mechanical
49	Dr. Udai Pratap Singh	LNCT Bhopal	Application of MATLAB for optimization problem in Chemical engg.	20-Jan-15	Chemical
50	Er. Gopal Agarwal	JP Enterprises	PID Controller/Industrial on line automation	23 Sept. 2014	Electrical
51	Dr. Pankaj Agarwal	SATI Vidisha	Flexible Manufacturing System	12 Sept. 2014	Mechanical
52	Dr. Guru Vittal	CRRI Roorkee	Geo Engg. Application in Highway	11 Sept. 2014	Civil
53	Er. Gopal Krishan Pharlia	Ministry of Power	Smart Electrical Grid Control	01 Sept. 2014	Electrical
54	Dr. R.K. Shrivastava	SGSITS Indore	Benefit of BE & ME	19 Aug. 2014	Civil
55	Dr. Sainath Pawaskar	Sandhiasthi India Ltd.	Mechanical Engg. And cross disciplinary research: Dawn of a new era	14-Jul-14	Mechanical
56	Prof. Sumantra Dutta	IIT Delhi	for UG & PG	08-Mar-14	CSE & IT
57	Er. Gopal Agarwal	J.P. Enterprises	Smart Relay /metering	28 Feb. 2014	Electrical
58	Dr. S.C. Choubey	Dean RGPV Bhopal	Energy saving measures in modern power systems	17 Feb. 2014	Electrical
59	Er. Rameshwer Singh	PGCIL Gwalior	Load sharing & substation management by PGCIL	7 Feb. 2014	Electrical
60	Er. G.K. Pharlia	NHPC Delhi	Reactive VAR management/control	24-Jan-14	Electrical
61	Mr. R.K. Mahapatra	BHEL Jhansi	Modern transformer manufacturing	10-Jan-14	Electrical
62	Er. A.R. Tupe	CAMTECH Gwalior	Bio Energy	06-Mar-14	T&P
63	Dr. Sunil Gupta	Central Research Institute , Kasauli	Role of biotechnology in Industry with emphasis on vaccine development	22 Oct. 2013	Biotech
64	Dr. Pradeep Srivastava	IIT BHU	Instrumentation and control of bioprocess	16 Oct. 2013	Biotech
65	Dr. Prashant Jain	IIITDM, Jabalpur	Rapid Prototyping	7 Oct. 2013	Mechanical
66	Dr. Ghanshyam Singh	GE Bangalore	Problem solving	5 Oct. 2013	Mechanical
67	Er. Girraj Goyal	SE, NF	Beneficial for BE & ME students	28 Sept. 2013	Civil

68	Er. S.K. Pachnanda	MPMKVVCL	Technical and managerial issues in resturtured power market	25 Sept. 2013	Electrical
69	Er. Shripad Baokar	ONGC	Marine engines and Equipments	19 Sept. 2013	Mechanical
70	Mr. Harsh Sahu	UOP Gurgaon	Refinery Oil and Gas sector: Scope and Career Aspect	13 Sept. 2013	Chemical
71	Prof. Pradeep Shrivastava	IIT BHU	Bioreactor Design and Control	6 Sept. 2013	Biotech
72	Dr. S.P. Tiwari	IIT BHU	Production Engineering/welding	26-Jul-13	Mechanical
73	Dr. A.K. Mulick	Consultant	Cement and concrete Technology	13-Apr-13	Civil
74	Dr. S.K. Thakar,	IIT Roorkee	Earthquake resistant Design of Structure IS: 1893	15-Mar-13	Civil

**Workshop/Conference/Seminar/STTP/FDP organized by Department under TEEQIP-II**

Sr. No	Type of Course	Department	Title	Date
1	Workshop	ISTE	Gesture Robotics	28-29 March 2017
2	FDP	CSE & IT	Innovative Trends in Computing	21-25 March 2017
3	Workshop	T&P	Prospects of Enterpreneurship and Skill Development	27 March. 2017
4	National Workshop	IEEE and IET	App Development (iOS/Android)	10 March. 2017
5	National Conference	Electronics	Recent Advances in Electronics and Communication Engg.	4-5 March 2017
6	Workshop	Civil	Current Practicws in Road Construction	03 March. 2017
7	STTP	CSE & IT	Recent trends in modeling and Computational Techniques in Science and Engineering	28 Feb. -10 March 2017
8	STTP	Mechanical	Advances in Manufacturing Systems	16-22 Feb. 2017
9	National Workshop	CSE & IT	Cyber Forensics Tools and Techniques	18 Feb. 2017
10	National Workshop	Electronics	Recent Advances in Communication Engineering	17 Feb. 2017
11	Nationa Workshop	Electrical	Solar and wind power Technology	15 Feb. 2017
12	Nationa Workshop	Electrical	Innovation of Electrical Engineering	14 Feb. 2017

13	Workshop	IET	Intellectual Property Right and Patents	4 Feb. 2017
14	Workshop	Electrical	Smart Grid Technology	6 Feb. 2017
15	National Workshop	Institutional	Quality in Technicl Education : A Challenge	18-19 Nov. 2016
16	National Workshop	Mechanical	Manufacturing Systems	23-24 Oct. 2016
17	National Conference	Electtonics	Recent Trends in Microwave Engineering	01 Oct. 2016
18	National Workshop	Electronics	Recent advances in microwave engg.	23-24 sept. 2016
19	Workshop	Civil	Gereen Buildings for sustainable development	23 Sept. 2016
20	Workshop	Electrical	Innovations in Electrical Engineering	7 Sept. 2016
21	Workshop	Mechanical	Finite Element Methods for enginers	1-2 April 2016
22	Seminar	Electrical	Renewable energy and microgrid	16 March. 2016
23	Seminar	Electrical	Renewable Energy & Microgrid	16 March. 2016
24	Conference	Electrical	Innovations in Electrical Engineerings	17 March. 2016
25	National Conference	Electrical	Innovations in Electrical Engineering	17 March. 2016
26	STTP	Electronics	Advanced Techniques in Signal Processing and Communication	1-5 March. 2016
27	Symposium	Applied Science	Novel and Smart Materials & Devices"Paradigm for fabrication & Characterization	5 March. 2016
28	STTP	Electrical	Recent Advances in Electrical Engineering	1-5 March. 2016
29	Workshop	Mechaical	Finite Element Method for Engineers	1-2 April 2016
30	Seminar	Chemical	Recent Trends in Waste Water Treatment	29 Feb. 2016
31	Workshop	CSE & IT	Cyber World and its related Crimes	25 Feb. 2016
32	Conference	CSE & IT	Advances in Information and Communication Technology	4-5 Feb. 2016
33	Workshop	CSE & IT	Research Methodology	29/01/2016
34	STTP	Electronics	Recent Advances in Microwave engineering	7-11 Dec. 2015
35	Conference	Electronics	Recent Advances in Communication Engineering	4-5 Dec. 2015

36	STTP	Applied Science	Application of Optimization Techniques for engineering and Technologies	23-27 Nov 2015
37	Workshop	Electrical	Application of MATLAB in Electrical Engineering	14-15 Oct. 2015
38	Workshop	Mechaical	Innovations in Energy	15 Sept. 2015
39	STTP	Electrical	Simulation Techniques of Power Electoronics Controller	12-16 May 2015
40	Workshop	Electrical	Software tools for Industrial Drives and Instrumentation	24-Mar-15
41	Seminar	Chemical	Recent trends in Chemical Engg.	20 March. 2015
42	Conference	Civil	Green building for sustainable development	19-20 march. 2015
43	Seminar	Applied Science	Chemistry for life	28 Feb. 2015
44	STTP	Applied Science	Testing of Adulteration	23 Feb. 2015
45	Conference	CSE & IT	Advances in Information and Communication Technology	23-24 Feb. 2015
46	Paper Presentation	Electronics	Hazard due to electromagnetic Radiation	25 feb. 2015
47	Seminar	Chemical	Recent Advances in solar energy	13 Feb. 2015
48	Conference	Electrical	Innovation in Electrical Engineering	10-11 Feb. 2015
49	Workshop	Civil	Scheduling of Construction Projects	24-25 Jan 2015
50	Conference	Applied Science	Advances in Mathematical Applications for engg. & Technology	20-21 Dec. 2014
51	Conference	Civil	Alternative & Innovative Construction Materials & Techniques	27 Sept. 2014
52	Workshop	Applied Science	Emerging trends in materials for engineering application	9 Aug. 2014
53	Workshop	CSE & IT	Cloud Computing	13-15 May 2014
54	Workshop	Civil	Applicatin on GIS and Remote sensing in Engineering	25-26 Feb. 2014
55	Conference	Electrical		22 Feb. 2014
56	Conference	Electronics	Emerging trends in Communication, control, and Networking	1-2 Feb. 2014
57	Workshop	Mechaical	Hybrid solar PVT Technologies	15-16 January 2014
58	Workshop	Chemical	Computational Fluid Dynamics	14-15 Jan. 2014

59	STTP	Electrical	Nature Inspired Optimization Techniques for Engg. Applctaions	2-6 Dec. 2013
60	EDP	EDC	Enterpreneurship development programme	27 Nov. 01 Dec. 2013
61	STTP	CSE & IT	Research Methodology	11-15 Nov. 2013
62	STTP	Civil	Waste in Construction and Energy Sector	21-25 Oct. 2013
63	Workshop	Chemical	Advances in Chemical Engg.	21-25 Oct. 2013
64	Workshop	Electrical	Renewable energy based power generation : Options and challenges	14 Sept. 2013
65	Workshop	Biotech	Computer Aided Drug Design	15-16 April 2013

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

About 2% of the faculty members have utilized Sabbatical/Study leave for research activities. The College has a policy to depute faculty to pursue their Ph. D through QIP at reputed Universities/Institutions enabling them to promote research culture in the campus. The faculty members who are pursuing Ph.D. are granted study leave to carry out their research work.

The faculty who availed such encouragement given by the College has contributed to improve the quality of research in the following ways:

- Active involvement in research activities by guiding Ph.D. scholars
- Submission of more project proposals from various funding agencies
- Research publications in indexed journals
- Dissemination of their enhanced knowledge levels in research activity to the peers and students thereby improving teaching learning process
- Establishment of Research Lab in specified area
- Contributed in developing new research setups

Name	Department	Qualification Enhanced	Institute	Date	
				From	To
Dr. C. S. Malvi	Mechanical Engineering	Ph. D	University of Leeds	07-05-2008	11-05-2012
Dr. M. K. Gaur	Mechanical Engineering	Ph. D	IIT, Delhi	27-07-2007	30-06-2012
Dr. Tripti Jain	Electrical Engineering	Ph. D	IIT, Kanpur	01-07-2007	01-08-2010

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land).**

Following initiatives are taken up by the institution for creating awareness and propagation of research temperament to student community:

- Conduction of final year projects using novel technologies
- Briefing students by Head of Department in classrooms and seminar halls
- Conduct of guest lectures
- Access to NPTEL resources
- Library having IEEE resource (multiuser) and Springer journals etc.
- Wi-Fi Campus
- National and International level technical magazines are available in Central Library
- Industry visits
- Industrial training as a part of course curriculum
- Participation in inter and intra college technical presentations

**3.2 Resource Mobilization for Research**

**3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

Financial year	2013-14	2014-15	2015-16
Allocation of fund	40 lacs	40 lacs	40 lacs
Actual expenditure on R&D activity	25.60 lacs	32.41 lacs	16.25 lacs

**3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

The institute provides seed money for Registration & TA/DA towards participation in International/National Conferences. A maximum amount of Rs. 25,000/- (Rs. Twenty five thousand only) may be reimbursed to a faculty for presenting paper in International conference and Rs. 5,000/- (Rs. Five thousand only) may be reimbursed for presenting paper in National conference. Amount utilized for this purpose during last four years is as follows:

Year	2011	2012	2013	2014
Amount (Rs.)	17087/-	37003/-	12458/-	6590/-

### 3.2.3 What are the financial provisions made available to support student research projects by students?

Each department allocates a finite proportion of their budget towards research projects of students. To support student research activities critical components, software's etc are procured from time to time. Students are encouraged for seeking funding from the agencies such as DST and UGC or any other reputed private group. However, smaller projects with better prospect and utility are financed by the college as well. Following Table shows the financial provisions to support different research activities by students:

Events	2013-2014 (Rs)	2014-2015(Rs)	2015-16
BAJA	340900	-----	1,3
GO-KART	-----	-----	
EFFICYCLE	108000	-----	
PAPER RECYCLE PLANT	-----	40000	
WHEEL CHAIR	-----	18000	

### 3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.

Faculty members are guiding students in interdisciplinary areas for example:

- Faculty of Applied science department is working with faculty of Electronics Engineering Department for research work.
- Faculty of Mechanical Engineering and Electrical Engineering are working jointly for research
- Faculty of Chemical Engineering and Computer Science & Engineering are working jointly.
- Faculty of Electronics and Electrical Engineering department are jointly doing the research work.

### 3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- Institute ensures the library facilities and a conducive environment to encourage/ motivate the staff and students to take a step forward to pursue research in their relevant field/interests. Basic research facilities are available in all departments.

- Each department has relevant infrastructure and instruments for basic research work. A separate Computer lab has been made available to students for their research work and to access related Journals and papers. High speed internet facility has also been provided.
- Institute also ensures availability of Delnet, IEEE standard facility and students and staff are facilitated to use the equipments, books, Journals, Software and lab facilities of the department beyond the Institution timings.
- Software available in various departments are made accessible for students and faculty to carry out their research.
- Books purchased through research grant are made available for all the students and faculty members.

**3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.**

Yes, the following departments have received financial assistance for development of infrastructure from Department of Science and Technology, Govt. of India under "FIST" Programme:

- Department of Electronics
- Department of Electrical Engineering
- Department of Civil Engineering

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years.**

Faculty members are motivated to submit the research proposals to different funding agencies, industry and other organizations on a regular basis. Details of ongoing and completed projects and grants received during the last four years are provided in Table below:

Nature of the project	Duration Year	Title of the project	Name of the funding agency	Total Grant (Rs.)		Total grant received till date (Rs.)	Name of Principal Investigator
	From..... To			Sanctioned	Received		
Minor projects	2011 to 2013	Development of Flexible Framework For Mining Association Rules	AICTE (Under RPS Scheme)	5,00,000/-	5,00,000/-	5,00,000/-	Dr. R. K. Gupta
	2011 to 2012	Isolation and Characterization of Antibody Producing Acetinomycetes from Gwalior Chambal Region	DRDE, Gwalior	2,94,000/-	1,68,000/-	99,382/-	Prof. Hotam Singh Choudhary
	2014 to 2015	Characterization of ITO	INUP, IIT	Reimbursement	of	TA/DA	Dr. C. S. Malvi



		Nano-practical	Bombay	&arrangement for conducting experiments at IIT Bombay, Mumbai			
	2009 to 2012	Congestion Control in Adhoc Networks	Institution of Engineers (India)	50,000/-	50,000/-	50,000/-	Prof.Laxmi Shrivastava & Dr.Sarita Singh Bhadoria
	2 years	Fuzzy logic based congestion control for mobile adhoc networks	MPCST, Bhopal	3,05,000/-	3,05,000/-	3,05,000/-	Prof.Laxmi Shrivastava &Dr. Sarita Singh Bhadauria
<b>Major projects</b>	2011 to 2014	An Efficient Multimodal Identification System with Reduced Recognition Time	DST, Govt. of India	29,95,200/-	15,38,880/-	15,38,880/-	Prof. Poonam Sharma &Dr R.K. Gupta
	2012 to 2015	Soft Computing Techniques for Optimal Allocation of Facts Devices to improve Power System Performance	UGC, New Delhi	11,52,600/-	9,54,600/-	9,54,600/-	Dr. Laxmi Srivastava
	2008 to 2012	Seismic Protection of Heritage Building	AICTE, Delhi	13,50,000/-	13,50,000/-	13,50,000/-	Dr. S. K. Jain
	2011 to 2013	Construction Time Cost Trade Off Analysis Using Optimization Techniques	AICTE Delhi	12,75,000/-	12,75,000/-	12,75,000/-	Dr. R. Kansal
	2013 to 2016	Heat and Mass Transfer Analysis of Hybrid Solar Dryer with Uniform Heating	AICTE	13,52,941/-	12,00,000/-	12,00,000/-	Dr. M. K. Gaur
	2013 to 2015	Development of Multi-purpose Solar Lamp	DST	12,00,000/-	9,00,000/-	9,00,000/-	Dr. C. S. Malvi
	2011 to 2014	Performance Analysis of Solar operated Vapour absorption	AICTE	10,30,000/-	10,30,000/-	10,30,000/-	Dr. Rajesh Agarwal and Dr M..K. Gaur
	2012 to 2014	Spectrum sensing for cognitive radio application	AICTE	6,60,000/-	6,60,000/-	6,60,000/-	Dr. Rekha Gupta
	<b>Interdisciplinary projects</b>	2012 to 2014	Soft sensor development for chemical process	AICTE New Delhi (RPS project head)	15,00,000/-	15,00,000/-	15,00,000/-
<b>Industry sponsored</b>	-----	-----	-----	-----	-----	-----	-----
<b>Students' research projects</b>	2015 to 2015	Sustainable paper recycling plant for an institute	Institution of Engineers (India) R&D Grant-in-aid scheme	40,000/-	40,000/-	40,000/-	Dr. C. S. Malvi (for M. Tech student Mr. Sunil Dohare)
<b>Any other (specify)</b>	2011 to 2012	Upgradation of Lab.	AICTE, Delhi (MODRO B Scheme)	5,00,000/-	5,00,000/-	5,00,000/-	Dr. R. K. Gupta
	2011 to 2012	Enhancement of Testing facility in Conc. Lab	AICTE, Delhi	3,50,000/-	3,50,000/-	3,50,000/-	Dr. S. K. Jain

		(MODRO B Scheme)				
2015 to 2016	Up-gradation of MOM Lab	AICTE, Delhi (MODRO B Scheme)	13,00000/-	13,00000/-	13,00000/-	Dr. C. S. Malvi
2012 to 2014	Up-gradation of Antenna lab	AICTE, Delhi (MODRO B Scheme)	550000/-	550000/-	550000/-	Dr. P. K. Singhal

### 3.3 Research Facilities

#### 3.3.1 What are the research facilities available to the students and research scholars within the campus?

The Institution is running UG and PG courses. Resources like laboratories, digital library (Delnet), Central computer lab and software especially for research and project work of the students are made available. The R&D Committee is available for guiding research activities and monitoring the quality of research of the students.

A central Computer lab with High speed Internet facility, Wi-Fi, E-Learning facility is also available for the students and faculty to enable them to review their academics as well as their research Programmes. IIT Bombay Remote Centre workshop lab has been provided to students and faculty.

For post graduates research unconventional machines i.e. ECM, EDM, PAM and MIG welding are available. MATLAB, CATIA v5, Ansys Fluent, ASPEN PLUS, UNISIM, PROSIM, Lab View, WEKA, PSCAD, OMNET, NETSIMetc software are available in simulation, modeling lab and other research purposes. SKF Pune has also established reliability testing centre which can be used by the students for their research work.

#### 3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

The institute is motivating the faculty for writing research proposals. The state-of-the-art facilities are being created in various departments of the institution which are available for faculty members and the research scholars. Further, Institute has been assisted by World Bank through Technical Education Quality Improvement Program (TEQIP) Phase II and received a total grant of Rs. 10.0 crores. 2% of this amount is allocated and being used for enhancement of R & D and institutional consultancy activities. Various Workshops/Seminars and Short term courses are being organized by the institute on new and emerging areas. Faculty members are being sent to attend training Programmes. The institute has created facilities in new and emerging areas like SKF Asset Reliability Centre, IBM Laboratory, Infosys Campus Interconnect Programme and Vibration Measurement System etc.

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments / facilities created during the last four years.**

Yes, the following departments have received financial assistance for development of infrastructure from Department of Science and Technology, Govt. of India under "FIST" Programme:

- Department of Electronics
- Department of Electrical Engineering
- Department of Civil Engineering

Along with the above, all the departments are receiving financial assistance from All India Council for Technical Education, New Delhi, University Grant Commission, New Delhi, M.P. Council for Science and Technology, Bhopal, World Bank. The following major equipment/facilities have been developed:

- Simulation of transmission and distribution system along with the protection schemes
- Microwave Measurement facilities
- Antenna Testing facilities
- Image processing facilities
- Computer networking laboratories
- Reactive distillation setup
- Ansys fluent software for CFD
- ASPEN PLUS design software
- Reliability testing center
- Instruments for fluid mechanics lab
- Recording of bio electrical signals
- Software for analysis of power system
- Virtual lab
- Microprocessor laboratory
- High performance liquid chromatography and gas liquid chromatography machines
- Universal testing machine
- Polymerase chain reaction machine
- DNA sequencer
- Network simulation lab
- AI and soft computing lab
- PHE lab

**In addition to above, fund from World Bank has provided fund through TEQIP- Phase II and III of MHRD for developing research facilities.**

### **3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?**

Departments have entered into MoU with relevant industries for the purpose of providing training facilities to students for upgrading knowledge and to carry out research oriented project work. Students avail these facilities through Heads of the Departments. Some students look into industry or training centres for availing advanced facilities required in their research work. Recently Institute has signed MoU with Delhi Technical University, New Delhi for collaborative research under twinning arrangement of TEQIP-III.

### **3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?**

Following facilities are available for research:

- Departmental library for every branch.
- Wi Fi Network in the campus
- LAN Internet
- Subscription of INDEST Journals, Science Direct journals, DELNET, IEEE, ASME, Springer, ACM, CSI etc.
- Technical journals, proceedings of national seminars etc.
- Digital Library
- Availability of reference books.
- Inter-library loan facility (ILLF) through DELNET

### **3.3.6 What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology etc.**

- Remote Center Programme has been connected directly from IIT, faculty and students interact with IIT faculty.
- Industry - Institute Interaction Initiatives
- Industry relevant courses and content
- Final year student project support and placement
- MoU with IIT Gandhinagar for carrying out research work
- Mo U with Mahatma Gandhi Chitrakut Gramodaya Vishwavidhyalaya for Uplift of education skill research and extension of both the institutions and Joint research projects and staff exchange programs from June 2016 –May 2021
- MoU with IBM

## **3.4 Research Publications and Awards**

### 3.4.1 Highlight the major research achievements of the staff and students in terms of

- \* **Patents obtained and filed (process and product)**
  - Patent filed on the topic “Sustainable Paper Recycling Plant” dated on 01/10/2014. Positive Novelty search report has been received. The name of the applicants who filed the patent are Dr C.S Malvi and Mr Vinay Bhaskar.
  - Patent filed on the topic “Dust Removing Mechanism for cleaning Solar Panel Arrays” dated on 07/05/2014. The name of the applicants who filed the patent are Dr C.S Malvi, Ms Richa Aggarwal and Mr. Sunil Dohare
- \* **Original research contributing to product improvement**

Research like “Sustainable Paper Recycling Plant”, “Dust Removing Mechanism for cleaning Solar Panel Arrays”, “Solar Panel Cleaner for Street light” has not only improved the product but also benefited the community
- \* **Research studies or surveys benefiting the community or improving the services**

Citation of research papers published out of the research done in the department indicates that the research community is being benefited.

- \* **Research inputs contributing to new initiatives and social development**

Faculty members are working in diversified areas like:

- Biological effect of Electromagnetic radiations
- Paper recycling
- Wheel chair for physically different persons
- Solar energy harvesting
- Environmental protection
- Robotics
- Green housing
- Low cost housing
- Waste water management
- Water harvesting
- Drug testing & development
- Soil testing

### 3.4.2 Does the institute publish or partner in publication of research journal(s)? If yes indicate the composition the of the editorial board, publication policies and whether such publication is listed in any international database?

No

### 3.4.3 Give details of publication by the faculty and student

- Publication per faculty
- Number of papers published by faculty and students in peer reviewed journals(National/International)
- Number of publications listed in international database (e.g Web of science, Scopus, Humanities International complete, Dare Database- International Social Sciences Directory, EBSCO host, etc.)
- Monographs
- Chapters in Books
- Books edited
- Books with ISBN/ISSN number with details of publishers
- Citation Index
- SNIP
- SJR
- Impact factor
- H-index

### MECHANICAL ENGINEERING

S. No	Name of Faculty	No of Publication
1	Dr C.S Malvi	50
2	Dr Manoj Gaur	57
3	Dr Manish Sagar	28
4	Dr Awadhesh Sharma	36
5	Dr Pratesh Jaiswal	33
6	Prof R.P Kori	17
7	Prof Jyoti Vimal	33
8	Prof Vedansh Chaturvedi	40
9	Prof Vaibhav Shivhare	06
10	Prof Sharad Aggarwal	14
11	Prof Dinesh Kasdekar	38
12	Prof Amit Ahirwar	27

### ELECTRICAL ENGINEERING

S.No.	Faculty Name	Publications (Journals/ Conferences)
1.	Dr. Manjaree Pandit	(62,96)

2.	Dr. Laxmi Srivastava	(88,143)
3.	Dr. Arun Kumar Wadhwani	(70,95)
4.	Ashish Patra	(8,16)
5.	Dr. Sulochana Wadhwani	(48,78)
6.	Hari Mohan Dubey	(18,16)
7.	Dr .Shishir Dixit	(16,24)
8.	Rakesh Narvey	(12,07)
9.	Himmat Singh Ahirwar	(10,15)
10.	Vijay Bhuria	(20,18)
11.	Kuldeep Kumar Swarnkar	(28,15)
12.	Praveen Bansal	(19,06)
13.	Vishal Chaudhary	(04,03)
14.	Vijay Kumar Tewari	(00,02)

#### APPLIED SCIENCE

S.No.	Faculty Name	Publications in the Journals
1.	Dr. Abhay Mishra	15
2.	Dr. V.P. Shinde	26
3.	Dr. D.K. Jain	31
4.	Dr. Anjula Gaur	07
5.	Dr. Shourabh Bhattacharya	09
6.	Prof Jitendra Kumar	07
7.	Dr. Pooja Sharma	03
8.	Dr Peeti Gupta	02
9.	Dr Mamta Sharma	01
10.	Prof D K Mishra	01
11.	Dr. Uday Pratap Singh	05

#### COMPUTER SCIENCE & ENGINEERING AND INFORMATION TECHNOLOGY

S. No.	Name of Faculty	No. of Publications
1.	Dr. R. K. Gupta	43
2.	Dr. Akhilesh Tiwari	37
3.	Prof. Manish Dixit	13
4.	Prof. Khushboo Agarwal	02
5.	Prof. Puneet Kumar Johari	09
6.	Dr. Sanjiv Sharma	32
7.	Prof. Vikas Sejwar	13
8.	Prof. Abhilash Sonkar	08

9.	Prof. Jaimala Jha	04
10.	Prof. Jamvant Singh Kumare	03
11.	Prof. Rajeev Kumar Singh	09
12.	Prof. Neha Bhardwaj	03
13.	Prof. Mahesh Parmar	03
14.	Prof. Rajni Ranjan Singh	05
15.	Prof. Amit Kumar Manjhwari	01

### CHEMICAL ENGINEERING

S.No.	Name of Faculty	No. of Publications
1.	Dr. Shriram Prasad	37
2.	Prof. V. Sakhre	15
3.	Prof. S.S. Trivedia	09
4.	Prof. Anish P. Jacob	05
5.	Prof. Swati Gupta	04

### ELECTRONICS ENGINEERING

S. No.	Faculty Name	No. of publications
1.	Dr. P.K. Singhal	80
2.	Dr. Sarita Singh Bhadauria	63
3.	Dr. Bimal Garg	32
4.	Dr. Rekha Gupta	14
5.	Dr. Vandana Vikas Thakare	42
6.	Dr. Laxmi Shrivastava	48
7.	Dr. R.P. Narwaria	19
8.	Dr. Karuna Markam	36
9.	Prof. Madhav singh	11
10.	Prof. Pooja Sahoo	08
11.	Prof. Deep Kishore Parsediya	04

### MECHANICAL ENGINEERING

S. No.	Name of Faculty	Citation index	h-index
1	Dr C.S Malvi	42	03
2	Dr Pratesh Jaiswal	137	04
3	Dr Manoj Gaur	117	05
4	Dr Manish Sagar	-	-
5	Dr Avadesh Sharma	45	03
6	Prof R.P Kori	-	-
7	Prof Vedansh Chaturvedi	75	04
8	Prof Jyoti Vimal	37	03
9	Prof Vaibhav Shivhare	-	-



10	Prof Sharad Aggarwal	-	-
11	Prof Dinesh Kasdekar	-	-
12	Prof Amit Ahirwar	16	02

### Computer Science& Engineering and IT

S. No.	Name of Faculty	Citation	h-index
1.	Dr. R. K. Gupta	65	5
2.	Dr. Akhilesh Tiwari	63	4
3.	Prof. Manish Dixit	39	3
4.	Prof. Khushboo Agarwal	-	-
5.	Prof. Puneet Kumar Johari	09	2
6.	Dr. Sanjiv Sharm	-	-
7.	Prof. Vikas Sejwar	-	-
8.	Prof. Abhilash Sonkar	-	-
9.	Prof. Jaimala Jha	-	-
10.	Prof. Jamvant Singh Kumare	-	-
11.	Prof. Rajeew Kumar Singh	02	-
12.	Prof. Neha Bhardwaj	-	-
13.	Prof. Mahesh Parmar	-	-
14.	Prof. Rajni Ranjan Singh	09	2
15.	Prof. Amit Kumar Manjhwari	-	-

### Electrical Engineering

S. no	Name of Faculty	Citation index	h-index
1	Dr. Laxmi Srivastava	1288	17
2	Dr. Manjaree Pandit	973	13
3	Dr. Arun Kumar Wadhvani	245	07
4	Ashish Patra	-	-
5	Dr. Sulochana Wadhvani	139	07
6	Hari Mohan Dubey	84	06
7	Dr .Shishir Dixit	-	-
8	Rakesh Narvey	-	-
9	Himmat Singh Ahirwar	-	-
10	Vijay Bhuria	-	-
11	Kuldeep Kumar Swarnkar	51	04
12	Praveen Bansal	-	-
13	Vishal Chaudhary	-	-
14	Vijay Kumar Tewari	-	-

## Book Chapter

S No	Name of faculty	Book Name	Publisher Name with ISBN/ISSN no
1	Dr Manish Sagar	Book chapter is published in "Advances in Management and Technology: Mapping Strengths with Opportunities"	McGraw Hill Education (India) Private Limited, ISBN-13:978-93-392-2075-4, New Delhi,
2	Dr. Manoj Gaur	Solar energy: Problem , solution and experiment	Anamaya Publication, New Delhi. ISBN: 13978-81-88342-64-8

### 3.4.4 Provide details (if any) of

**\*Research awards received by the faculty**

**\*Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**

**\*Incentives given to faculty for receiving state, national and international recognitions for research contributions.**

- Dr. S.K. Jain received Japanese Government Scholarship for Post Doctoral Research.
- Dr. S.K. Jain Biography included in Marquis Who's Who in the world.
- Dr. S.K. Jain received Maharashtra State National Award for outstanding research work in engineering and Technology awarded by ISTE, New Delhi.
- Dr. S.K. Jain received Dr. Jai Krishna Medal by Institution of Engineers (India) for published research paper in the area of Earthquake engineering.
- Dr. S.K. Jain received Khosla Commendation certificate of I.I.T. Roorkee for published research paper in the field of Earthquake Engineering.
- Dr. S.K. Jain received Khosla Second Prize of U.O.R., Roorkee for published research paper.
- Dr. Manjaree Pandit received UGC post doctoral research award for 2 years(salary for 2 years and contingency for Rs. 3.0 lacs)
- Dr. Laxmi Srivastava rewarded for review work, provided free membership (MIEE) by Institution of Electrical Engineers (UK) for one year.
- Dr. Manjaree Pandit received ISTE-Raja Rambapu Patil National Award

for promising Engineering teacher.

- Dr. Manjaree Pandit and Dr. Laxmi Srivastava received certificate of merit from Institution of Engineers, for their joint paper .
- Dr. Manjaree Pandit received ISTE-Maharashtra Government National Research Award for work done by teachers of Engineering colleges
- Dr. Laxmi Srivastava received Khosla Research Gold Medal and cash award for Best Research Paper , from I.I.T., Roorkee.
- Dr. Sulochana Wadhvani , Dr. S.P. Gupta and Dr. Vinod Kumar received certificate of merit from Institution of Engineers, for their joint paper .
- Dr. Laxmi Srivastava , received Best paper award on Energy and Power Engineering (ICEPE2011) held at VITS, Mumbai.
- Dr. P.K. Singhal, Department of Electronics received AICTE Career award.
- Dr. Sarvesh Jain, Dept. of Civil Engineering received AICTE Career award.
- Prof. Anil Kumar Saxena received award from AICTE for Best Technical Book in Hindi, "Lok Swasth Yantriki" (in Hindi).
- Dr. C. S. Malvi, Madhya Pradesh young scientist award.
- Dr. Anshu Chaturvedi, Madhya Pradesh young scientist award.
- Prof. Vedansh Chaturvedi, Madhya Pradesh young scientist award.
- **Dr. Alok Sharma**, written and prepared Drama on Solid Waste management issues named "**Kachra Rakshas**" for Public Sensitization and awareness. The drama has been performed and appreciated in Gwalior, Indore, New Delhi & in its Chandigarh show (in front of Governor & C.M. an Ministers & officers of Haryana State)
- **Dr. Alok Sharma** elected as Hon. Joint Secretary of Indian Institute of Architects of MP Chapter .(Second term)President, Parivartan Samooh, Gwalior (An Active Theatre and Art Group)
- Prof. Hotam Singh Chaudhary, elected as Secretary cum Treasurer of Association of Microbiology of India, Gwalior Unit.
- Prof. P.K.Singhal is Hon Secretary of Institution of Electronics and Telecommunication Engineers, New Delhi

### 3.5 Consultancy

3.5.1 Give details of the systems and strategies for establishing institute-industry interface?

Faculty members are encouraged for testing and consultancy activities in different areas. Incentives are also given in term of finances. Institute has adequate infrastructure for testing and consultancy.

**3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?**

Faculty of the Institute is actively involved in providing the consultancy to the government and private organizations. Faculty members are motivated to take such works and, if required, allowed special leaves to visit the sites. Laboratories are kept up-to-date and computational facility (including softwares) are procured/ upgraded on routine basis to enable faculty members take such jobs. Further, apart of the amount received as consultancy fee is disbursed to the team involved in the consultancy work. Letters are sent to various organizations to apprise them regarding Institutes' competency in taking consultancy jobs.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

Institute makes all efforts to encourage the faculty /staff for utilization of all human resources, intellectual support and available facility in the campus. The college motivates the faculty to utilize their expertise for consultancy services. This results in promoting liaison with industry/companies. Faculty also visit the industry for delivering lecture. In return, the students get an opportunity to visit these companies and seek better placement.

**3.5.4 List the broad areas and major consultancy services provided by the Institution and revenue generated during the last four years:**

S. no.	Project	Date	Amount in Rs.
1.	Design & Drawings of Regional office of M. P. Rajya Viparan Board, Morena	Jan. 2011	152889/-
2.	Preparation of Housing lay out for the rehabilitation of villages Dhobni, Nahar kheda and Suhela, District Sheopur, for Kaketo Dam	Jan. 2012	105058/-
3.	The consultancy charges for providing the Housing lay out for the rehabilitation of village Boorda District Shivpuri for Kaketo Dam	March, 2012	98931/-
4.	Providing consultancy for Interior Furnishing of IIDC Administration building, Gwalior	March, 2013	54540/-
5.	Checking of Design & Drawings of Hotel building of M/s Saloni Hotel & Resorts, Agra	June, 2013	49450/-
6.	Checking of Design & Drawings of IIDC, RCC overhead Tank & Sump well at Garment Park	June, 2013	19231/-

	Gadaipura, Gwalior		
7.	Checking of Design & Drawings of IIDC, RCC overhead Tank & Sump well at Sitapur Pahadi, Morena (Phase-1)	Aug., 2013	24725/-
8.	Project Incharge IIDC for Industrial Area Development of Morena	2014-2015	2,00,000/-
9.	IIDC office Interior works	2014-2015	2,00,000/-
10.	Mukhya Mantri Infrastructure Development scheme Phase II ( Became a part of smart city Proposal now) Total Amount ( 52 lakhs)	2014-2015	7,50,000/- (received)
11	Antenna testing	2014-15	Rs.30,000/-

- Apart from this, Consultancy has also been provided in various central and state government departments like CPWD, MES, Indian Railways, Water Resources, PHE, Housing Board, SADA, GDA etc. Also, testing and consultancy is provided to large number of private contractors, builders, consultants, manufacturers, suppliers. The overall revenue generated from the consultancy services provided by the civil department during last four years amounts to approximately Rs. 60 Lacs/- Some of the clients of Electrical Engineering Department are as follows

- M/s J.B Mangha Ram Food Pvt. Ltd., Gwalior
- M/s Atlas Cycles Haryana Ltd., Malanpur.
- M/s Ranbaxy Laboratories Ltd., Malanpur.
- M/s Shiva Industries ,Bhind Road
- M/s Airport Authourty of indiaLtd., Gwalior
- M/s Punj Lloyd , Malanpur
- M/s Crompton Greaves Ltd. Malanpur
- M/s Kodak India Pvt. Ltd. Malanpur
- M/s Hindustan Petroleum Rairu ,Gwalior
- M/s Rituraj Steel Industries, Shivpuri
- M/s Shitla Engineering works Gwalior.
- M/s Godrej Consumer Product Ltd. Malanpur.

**3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?**

S.No.	Head	Share (In%)
1.	Institute Development	12

2.	Director	08+ 3.6
3.	Institute Share	20
4.	Head	1.2
5.	Accounts	2.8
6.	Typist	0.4
7.	Distribution among Team	52

Service tax as per prevailing rates is being charged from the client

### 3.6 Extension Activities and Institutional Social Responsibility (ISR)

#### 3.6.1 How does the institution promote institution-neighborhood network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

Faculty in-charge of NSS conducts Programmes for the benefit of rural population in the villages surrounding the Institute. These include distribution of learning material, blood donation & medical camps, adult literacy to rural schools & donation of computers. Some of the following activities are organized on a periodic basis:

- Tree plantation.
- Poor students of nearby area are taught by students of MITS in evening.
- Institute organizes various events like Singing and Dancing Competition for school students.
- Motivational programmes such as experts lectures are organized for school children.
- Organizing sports programme for school students.
- NSS activity is organized.
- Camps organized by Institute students.
- Free distribution of books, stationary and uniform to children of slum areas.
- Blood Donation camp is organized.

#### 3.6.2 What is the institutional mechanism to track students' involvement in various social movements/activities which promote citizenship roles?

- NSS Programme officer and his team keeps track of student involvements.
- Each class has mentors for every 20 students who closely interact with the students for academic and personal problems. They provide continuous

counseling and they are aware of the students' involvement.

- The Placement officer maintains continuous email correspondence with students on rolls and alumni.
- Induction programme and social gatherings provide a forum for interaction among the students.
- Alumni meet held twice a year gives scope for interaction among alumni and alumni with faculty and management.
- Organizing traffic awareness programme.

### **3.6.3 How does the institution solicit stakeholders' perception on the overall performance and quality of the institution?**

#### **Alumni:**

Alumni meet is arranged twice a year. Interaction with the alumni is mostly on curriculum, new technologies and academic advice they can offer for growth of departments. Some of alumni when they visit the college, are requested to address the students.

#### **Parents:**

Parents are essential as they are concerned about their wards' performance. Parents meet is arranged at the admission time called orientation programmes. They discuss about the facilities in college, job/placement activities. Some of them, in professional line offer valuable advice. Another occasion is Graduation day, which is almost like exit meeting. By that time, parents are fully aware of college and offer their own experience of their wards' study in College. Further, the college has a practice of communicating the attendance, internal marks, irregularity of attendance etc to the parents.

#### **Students:**

Students are active in giving suggestions, particularly when they come to 3<sup>rd</sup> and 4<sup>th</sup> year. Feed back is collected twice in each semester. Their close interaction with the Placement Cell, Directors, Library staff give lot of inputs.

#### **Industry :**

Industry personnel are in all Statutory Boards. Guest Lectures are organized by every department. Industry visits by students Experts as examiners for projects

### **3.6.4 How does the institution plan and organize its extension and outreach Programmes? Providing the budgetary details for last four years, list the major extension and outreach Programmes and their impact on the overall development of students?**

The Institute is organizing a number of outreach activities which relate to academic, social, cultural and community service.

- Institute motivates faculty and students for participation in these programmes.
- Allot dedicated Programme Officers and faculty to organize awareness camps.
- Institute invites Red Ribbon Club for Blood Donation Camps.
- Institute invites Doctors for Dental and Health Checkup programme.
- Institute plans tree plantation programme every year for villages

S.No.	Year	Amount for ISR activities (Rs)
1	2012-2013	53719/-
2	2013-2014	88295/-
3	2014-2015	33000/-
4	2015-16	39,454/-
5	2016-17	11804/- upto 26/12/2016

**NSS Activities 01<sup>st</sup> July to 14<sup>th</sup> December, 2016**

**Date: 14/12/2016**

1. Rally on World Population Day:
2. Voter Awareness Programme:
3. Literacy cum Awareness Programme:
4. Seminar on Waste Management:
5. Plantation:
6. Workshop on Digital India at Jiwaji university:
7. Cultural Program on NSS Day:
8. Blood Donation Camp:
9. Rally on Swaksh Bharat Abhiyan:
10. Seminar on Traffic Rules & Regulation:
11. Women Empowerment:
12. One Day Camp:
13. Medical Camp & Awareness Program at Village:
14. Medical Camp & Awareness Program at Village:

**NCC ACTIVITIES w.e.f. 01/01/2016 to 7/12/2016**

Following activities organized and participated by MITS NCC cadets;-

S.N.	Date of Events	Events



1.	16 <sup>th</sup> January	Start up India program (Make in India)
2.	24 <sup>th</sup> January	5 km. Marathon race
3.	25 <sup>th</sup> January	Voter"s Day
4.	26 <sup>th</sup> January	Republic Day Celebration
5.	20 <sup>th</sup> Feb. to 29 <sup>th</sup> February	Combined Annual Training Camp
6.	18 <sup>th</sup> April	Associate NCC officer conference
7.	21 <sup>st</sup> June	International Uoga Day
8.	13 <sup>th</sup> June to 22 June	Combined Annual Training Camp
9.	7 <sup>th</sup> July to 16 <sup>th</sup> July	Combined Annual Training Camp
10.	12 <sup>th</sup> August	Cycle Rally
11.	15 <sup>th</sup> August	Independence Day Celebration
12.	28 <sup>th</sup> August	Tree Plantation
13.	4 <sup>th</sup> September	Swacch Bharat Abhiyan
14.	9 <sup>th</sup> Sep. to 18 <sup>th</sup> Sep.	Combined Annual Training Camp
15.	18 <sup>th</sup> September	Swachh Bharat Abhiyan
16.	12 <sup>th</sup> Sep. to 24 <sup>th</sup> Sep.	Army Attachment Camp
17.	29 <sup>th</sup> September	World Tobacco Day Oath
18.	30 <sup>th</sup> September	Blood Donation in MITS
19.	2 <sup>nd</sup> October	Swachh Bharat Abhiyan Rally
20.	9 <sup>th</sup> October	Day of Girls Child Rally
21.	12 <sup>th</sup> November	Cancer awareness Rally
22.	13 <sup>th</sup> November	Blood Donation in J.A. Hospital
23.	14 <sup>th</sup> November	MITS Foundation Day Celebration
24.	15 <sup>th</sup> November	Associate NCC officer conferene

25.	27 <sup>th</sup> November	NCC Day Celebration, Swachh Bharat Avhiyan Rally
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**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/International agencies?**

NSS programme officer enrolls students from I year and trains them through various activities up to the IV year and till now. About 833 students have participated in NSS programme. Some students donate food items and bed sheets to the poor on a regular basis.

This Programme is aimed at educating the illiterate villagers through reading and writing of hindi language. Required study material is also supplied to the persons registered in this Programme. This Programme is running successfully under the NSS Unit of College. Certificate is also issued to the students.

**3.6.5 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from underprivileged and vulnerable sections of society?**

- The institute sincerely practices state social affirmative schemes introduced by the government for the access to higher education to the under privileged communities. The college Social Service unit has been organizing blood donation camps in the college every year. Also distributes uniform, stationery and fruits to under-privileged students.
- Nukkad Natak is performed by NSS team of MITS for youth awareness.
- The institute NSS team has organized anti tobacco campaign.
- From 25 January to 31 January 2013, 7 days residential camp was organized by NSS unit at Mohanpur village near Gwalior, which includes following activities:
  - Eye camp by Madam Bhasin from Ratna Jyoti Netralaya, Gwalior
  - Medical Camp by Dr. S. Yadav of GMRC, Gwalior
  - Organized rallies for environmental protection.

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

The college is established to provide knowledge and quality education to all sections of society. It aims to:

- Maintain modern outlook with contemporary developments without compromising on moral values.
- To provide knowledge and quality based education to the students by inculcating moral values, scientific temper and employing state of the art technologies.
- To pursue excellence towards creating manpower with high degree of intellectual, professional and cultural development to meet the national and global challenges.
- Spreading awareness in the institution and motivating other students as well to stand for the cause of social upliftment.
- Organize activity plan for the villages like strategy planning for standard of living in society.
- Develop an art of teaching and learning for continuous guiding and teaching of village students.
- Develop the art of donation and become leaders to guide juniors/students.

**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

Institute participates in every field like studies, games and sports, cultural or social activities either in house or outside.

- Institute adopted a village to support and help the local community and villagers.
- They initially consulted Surpanch, arranged Gram Panchayat meeting, management and students participated and planned for development of the youth and villagers with the help of villagers.
- Institute implemented a plan to involve villagers in all the NSS activities.
- College students organized camps at village for tree plantation, blood donation etc.
- In camp, several points were taken as initiatives to make the society aware of social and health problems, dowry system, environment protection, consumer protection awareness, anti corruption, HIV awareness, anti tobacco and cleanliness awareness etc.
- In NSS Special camp following day to day events are held
- Inauguration and Data Collection for literacy drive
- Saaf Safai Yojna
- Data Collection and Dental Camp
- Plantation programme
- Free general medical and Eye Check up camp

- Rally/Programmes for awareness and conducting games
- Samiksha Programme

**3.6.9 Give details on the constructive relationships forged (if any) with other institution of the locality for working on various outreach and extension activities.**

NIL

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

NIL

### **3.7 Collaboration**

**3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives-collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.**

- The institute collaborates and interacts with the research labs etc.by visiting these facilities and inviting them to visit the institute.
- Establishing contacts with research labs and industry by inviting resource persons.
- Industry visits of faculty and students.
- Inviting eminent resource persons from industry and reputed Institutes for seminars, special lectures.
- Organizing Workshops/seminar for students and faculty.

**3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of National importance/other Universities/industries/Corporate etc. and how they have contributed to the development of the institutions?**

- The Institution has made MoUs with many Universities and Industries in India for developing the research, promotional activities for the students and the faculty community. The below is the list of organized collaborations and establishment at Institute purpose:

<b>S.No.</b>	<b>Industry</b>	<b>Purpose</b>
1	MMC Ontario Ltd. Canada	Research & Development
2	Ajay rubber industry, Gwalior	Student visit

3	Gyatri auto industry, Gwalior	Project of student, and subject practical
4	Shubham Enterprize, Gwalior	Quality control system
5	Lupin Chemicals, Bhopal	Student activities
6	IBM, NOIDA	Training and certification courses for students
7.	SKF, Pune	Training and certification courses

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/creation/upgradation of academic facilities, students and staff support, infrastructure facilities of the institution viz. laboratories/library/new technology/placement services etc.**

The following industries are supporting the institute in developing the infrastructure facilities:

- MMC Ontario Ltd. Canada
- Ajay rubber industry, Gwalior
- Gyatri auto industry, Gwalior
- Shubham Enterprise, Gwalior
- Lupin Chemicals, Bhopal
- IBM, NOIDA
- SKF, Pune

**3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.**

S. No	Name	Expert's organization	Topic of lecture
1	Dr. S.N.Singh	IIT Kanpur	Future of power system, challenges, Keynote address, National workshop, held at MITS
2	Dr. Kailash Shrivastava	ABB Corporate Research, Sweden	Future of power system
3	Er. Minaxi Garg	(PGCIL) PowerGrid Corporation of India Limited	Renewable Energy Certificate Mechanism'
4	Er S. K. Pachnanda	MPMKVVCL	Technical and Managerial Issues in Restructured Power Market
5	Mr R K Mahapatra	BHEL	Modern transformer manufacturing/maintenance
6	Er G K Pharlia	NHPC	Reactive VAR management

			/control
7	Dr S C Choubey	UIT RGPV	Syncrophaser
8	Mr Gopal Aggarwal	J P Enterprise	Smart relay/ metering
9	Er G K Pharlia	NHPC	Smart Grid management/control
11	Dr Pankaj Swrankar	MANIT	Design of PID controller
12	Er Tarun SAKWAR	NHPC	Hydro electric power projects(design , commissioning etc)
13	Er Sharath Nair	Crompton Greaves Ltd	Design of drive motors and transformers
14	Er G K Pharlia	NHPC	Design of energy efficient smart grid
16	Ms Prena Agarwal	Upasala University	Education ,job prospective at Upasala University
17	Capt Aditya Jain	Indian Army(AAD Unit)	Job and opportunity Prospective at Indian army
18	Er. Peeyoosh Gupta	CAMTEC(GWALIOR Rail)	Preparation for IES, GATE
19	Dr Amit Kr Jain	IIT Delhi	Application of MATLAB in electrical engineering
20	Prof. D C Tiwari	Dept. Of Electronics SOS	Application of nanomaterials
21	Dr. Sanjay Tiwari	Dept. Of Electronics	Engineering of nanomaterials and their properties.
22	Dr. Prabhat Dwivedi	Sc. Officer IIT Kanpur	Characterization and 122odeling of nanomaterials
23	Dr. Gulshan Rehan	BRNS	Nuclear energy
24	Dr. P. Rajaram	Department of Physics SOS	Synthesis of nanomaterials
25	Dr. S.N. Achary	BARC	Characterization of materials using X-ray neutron diffraction technique.
26	Dr. Ravi Bhoosan	Department of chemistry	Optical isomerisation and resimization in drugs.
27	Dr. Radha Tomar	SOS Chemistry	Hazards and radioactive materials
28	Dr. S. Dharmaraja	Maths Department, IIT Delhi	Performance analysis of TCP variants using stochastic Petri Nets
29	Dr. G.C. Sharma	BRAU, Agra	Mathematical 122odeling of malaria-TB-HIV/ AIDA co-infection
30	Dr. Avanish Kumar	BU, Jhansi	Distribution of tasks over distributed real time systems
31	Prof. Renu Jain	SOMAAS	Generalized Fractional Fourier Transforms and their Applications
32	Er. Prasahant Trivedi	GM Telecomm. BSNL Gwalior	GSM, 3G
33	Dr. Pachouri	IIT Indore	Applications of DSP tools in biomedical engineering
34	Dr. K.V.Arya	Professor, IIITM Gwalior	Image processing
35	Dr. SD Josh	IIT Delhi	Recent Applications in DSP
36	V.K. Saxena	VC, Amity Gwalior	Networking

37	Dr Neeraj Shrivastava	Assoc. Professor, LNMIIT Jaipur	OFDM
38	Dr. Deepak Bhatnagar	University of Rajasthan jaipur	Design of Microstrip Antenna
39	Dr. Deepak Bhatnagar	University of Rajasthan jaipur	Microwave Radiations
40	Dr. S.K. Jain	SGSITS Indore	Microstrips Antenna,Soft computing
41	Dr. R Tomar	LNMIIT Jaipur	Microwave Engineering
42	Dr. M.M. Sharma	Principal GEC Ajmer	Microwave filters and Antennas
43	Dr. Mithlesh kumar	GEC jhalawar	RADAR
44	Dr. Prasanna Chandra	Director Center of Financial Management Bangalore	Issues related to project Financing
45	Prof. S.K. Thakkar	Former Professor, IIT Roorkee	Earthquake Resistant Design of Structures As Per IS:1893 (Part 1) 2002
46	Dr. A.K. Mullick	Consultant, Cement & Concrete Technology, Former Director, NCBM	Advances in concrete technology
47	Er. Girraj Goyal	Superintendent Engineer (AF), Maharajpura, Gwalior	Pre Engineered Building Structure: An Overview
48	Dr. R. K. Shrivastava	Professor Civil Engg., SGSITS, Indore	National Water Policy
49	Er. U. K. Guru Vittal	Scientist 'F', CRRI, New Delhi	Geo Engg. Application in Highway Engg.
50	Dr. Rakesh Singhai	RGPV, Bhopal	Cognigent Radio

**3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -**

- a) Curriculum development/enrichment
- b) Internship/ On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development
- e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning Programmes
- k) Introduction of new courses
- l) Student exchange
- m) Any other

Our institution has **Industry Institute Interaction (III) Cell** that encourages relationship between industry and institution. The objective of the III cell is to improve

the quality of technical education to meet the needs of the industry and to ensure the participation of industry in Technical Education programmes.

To reach the above said objective, III cell works towards:

- Arranging in-plant training / industrial visits
- Inviting experts from the MOU signed industries to delivers expert lectures.
- Exploring the possibilities of having industry-sponsored research and development scheme.
- Arranging workshops/seminars/conferences jointly with industries.
- Inviting experts from industries to chair the sessions and to deliver expert lectures etc., in workshops/ awareness programmes /students technical meet etc.
- Arranging training for teaching/non-teaching staff during winter and summer vacations.
- Students do project work with MoU signed companies.
- Offering technical consultancy as per specific needs of the industries
- To share the experience and expertise between institution and industry for mutual benefit.Example:

Purpose	Detail
Curriculum development/enrichment	<ul style="list-style-type: none"> <li>• Mr. Paristosh Jain, (Member in the BOS of CSE and IT department) from Information Mosaic Software Pvt. Ltd. Has contributed towards syllabus revision and curriculum development.</li> <li>• Mr. Mani Madhukar (industrial representative) from IBM India Pvt. Ltd. has also contributed for syllabus revision and curriculum development.</li> </ul>
Internship/On-the-job-training	<ul style="list-style-type: none"> <li>• Infosys</li> <li>• IBM India Pvt. Ltd.</li> </ul>
Summer Placement	<ul style="list-style-type: none"> <li>• Jamuna Auto</li> <li>• BHEL</li> <li>• BSNL</li> <li>• Cytogene</li> <li>• IOCL</li> <li>• Biopesticide and Biofertilizer limited</li> <li>• HCL</li> <li>• Wipro</li> <li>• Infosys</li> <li>• TCS</li> <li>• Teva</li> <li>• Sanchi Dughd Sungh</li> <li>• BORL</li> </ul>



	<ul style="list-style-type: none"> <li>• BEL</li> <li>• ONGC</li> <li>• Lupin</li> <li>• Indian Rail</li> </ul>
Faculty exchange and professional development-	<b>For Professional development part</b> <ul style="list-style-type: none"> <li>• Infosys</li> <li>• IBM India Pvt. Ltd.</li> </ul>
Extension	<b>Academic Extension</b> IIT Bombay for conduction of workshops and courses under Blended MOOC concept
Publication	<b>Please see Annexure III</b>
Student Placement	Institute has developed relations with the number of industrial houses for the placement of students
Twinning Programmes	Presently, Institute is running a programme/course in collaboration with IIT Bombay
Introduction of New Courses	UG in <ul style="list-style-type: none"> <li>• Automobile Engineering</li> <li>• Electronics &amp; Telecommunication Engineering</li> </ul> Number of PG programmes
Student Exchange	Students are visiting various research laboratories for project work.
Any other	Institute is interacting with more than 100 industries for research, testing, consultancy and students project activities.

### 3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/ collaborations.

A number of workshops, conferences, seminars, lecture series, online lectures, online faculty development programmes under the National Mission for Education through Information communication technology scheme of MHRD, Quality improvement programmes, Ph.D. programme under QIP scheme of MHRD have been organized for students and faculty. Institute is pioneer in organizing such type of programmes.

Numbers of programmes have been organized with help of world Bank under Technical Education Quality Improvement Programme (TEQIP)

Internship Programme and students projects are identified and memorandum of Understanding (MOU) is signed between the industry and Institute.

## CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 Physical Facilities

#### 4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

In order to create and enhance the infrastructure that facilitates effective teaching and learning, the policy is framed according to the strength of students in different streams. The policy also conforms to the strength of the staff appointed in the institution. There are various committees such as Department Committee, Advisory Committee, College Academic Council and Governing Body to review availability and requirement of infrastructural facilities and approve creation of new facilities. Master plan of the whole campus has been developed to facilitate effective teaching and learning.

#### 4.1.2 Detail the facilities available for

**a) Curricular and co-curricular activities - classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**

- The college has excellent infrastructure facilities to run the academic programme.
- Spacious, well ventilated and furnished class rooms with ICT facilities
- Computer Centres
- Digital Library
- Seminar Halls ,Conference Halls, Open Auditorium
- Well equipped laboratories
- Examination Cell
- Central Library
- Hostel for boys and girls
- Guest House
- Faculty quarters

**b) Extra-curricular activities - sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.**

The following facilities are available for sports:

- Cricket ground
- Football ground
- Volleyball ground
- Basketball court
- Badminton court

- Table tennis
- Gymnasium

The following facilities are also available in hostels

- Badminton court
- Volleyball court
- Table tennis
- Gymnasium (In girls hostel)

Institute has

- NSS and NCC units
- Music club
- Language lab
- Seminar hall
- Student activity center
- Literacy club
- Hobby club
- Eco club

**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution / campus and indicate the existing physical infrastructure and the future planned expansions if any).**

Dean(Development and planning) ensures the optimal utilization of the available infrastructure and apprise the infrastructure committee headed by a member of board of governors, about the requirement of infrastructure. The infrastructure committee prepares the master plan of the institute. The master plan is implemented after the approval from the board of governors.

Master plan of the institute is enclosed in Annexure IV.

Details of the expenditure made on various infrastructure facilities are given in the balance sheet of the institute as per Annexure V.

**4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?**

Institute has ensured infrastructural facilities to meet the requirements of students with physical disabilities in following ways:

- By providing all major facilities at easily accessible places.
- Providing due support in laboratory and workshops.

- Ramps are provided at the entrance of the buildings
- Wheel chair for physically disabled students.
- Primary health care

**4.1.5 Give details on the residential facility and various provisions available within them:**

- **Hostel facilities- accommodation available**

About 800 students are staying in various hostels of the institute. New hostel buildings are under construction to accommodate more students. All the rooms of the hostels have internet facilities.

- **Recreational facilities, gymnasium, yoga centre etc.**

- Each hostel is having separate recreation hall equipped with all the necessary facilities like internet, TV, News papers Indoor sports
- Music club, gymnasium with all the modern fitness machine, play grounds, gardens, health centre, student activity centre etc.

- **Computer facility including access to internet in hostel**

All the rooms of the hostels are having internet facilities and also WiFi.

- **Facilities for medical emergencies**

Institute has a medical dispensary with full time doctor and tie up with Birla hospital (located about 1.5Km from the institute) for all the medical emergencies.

- **Library facility in hostels**

News papers and magazines are made available in the reading room of all the hostels.

- **Internet and Wi-Fi facility**

The whole campus is having internet and Wi-Fi facility

- **Recreation facility-common room with audio-visual equipments**

All the necessary facilities are available in the whole campus.

- Available residential facility for the staff and occupancy, constant supply of safe drinking water
- Institute has a number of residential quarters for faculty and staff
- Institute also has a well furnished guest house.
- Drinking water

- Campus has four bore wells
- Two nagar nigam water connections
- One overhead tank with capacity of 200KL
- One overhead tank with capacity of 35KL
- More than 20 water coolers with “RO” filter plant.
- **Security**
  - A team of 32 security guards and the head guard are placed on duty by the reputed security agency hired by the college. These guards maintain a 24 hours security watch of the college.
  - CCTV cameras are installed at various locations in college campus.

**4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

- Institute has a medical dispensary for staff and students. The facilities available in the dispensary are:
  - Medical Examination Bed.
  - Emergency and life saving medicine.
  - Oxygen cylinder
  - BP Instruments
  - ECG machine
  - Nebulizer
  - Ambulance on call
- The college has set up a system for periodic preventive check up of health.

**4.1.7 Give details of the Common Facilities available on the campus - spaces for special units like IQAC, Grievance Redressal unit, Women’s Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

- Canteen, Bank, ATM and Guest House are available in the campus
- 30 kV sub station, and DG sets for uninterrupted power supply are available in the campus.
- Training and Placement cell
- Open Auditorium
- Women grievance cell, anti ragging cell, and Mahila Sex utpeedan cell, and discipline committee are existing as per the norms.

**4.2 Library as a Learning Resource**

Central Library of Madhav Institute of Technology & Science has rich collection of books and journals in the field of Engineering and Architecture related disciplines. Central Library currently houses around 1,00,000 books under different heads i.e Library grant,

Student chapter grant & Book bank grant, comprises vast of collection including textbooks and reference books for Engineering Graduates, Post Graduates and Ph.D scholars in Civil , Mechanical, Electronics, Electrical, Computer Science & Information Technology, Biotechnology, Chemical, Automobile Engineering, and Architecture Disciplines. Library collection also includes documents in Computer Science, History of Science, Fictions, Stories, General books, Encyclopedias and Dictionaries, Magazines etc.

**4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?**

The library advisory committee members meet three to six times in a year, wherein, the proposal of new addition to the stack is considered, rules and regulations for the book bank and daily issuing etc are from time to time providing better services to the library users.

The Library receives fund from the college budget, State Govt. & AICTE grants. The committee guides the library to use the fund judiciously.

**Library Advisory Committee Members**

- |                         |                              |
|-------------------------|------------------------------|
| • Prof. Sanjay Tiwari,  | Chairman                     |
| • Dr. P K Singhal       | HOD, Electronics Engineering |
| • Dr. Laxmi Shrivastava | HOD, Electrical Engineering  |
| • Dr. R K Gupta         | HOD, CSE/IT                  |
| • Dr. Archana Tiwari    | HOD, Civil Engineering       |
| • Dr. M. K. Gaur        | HOD, Mechanical Engineering  |
| • Prof. S. Prasad       | HOD, Chemical Engineering    |
| • Dr. Abhay Mishra      | HOD, Applied Science         |
| • Dr. Sunita Sharma,    | Coordinator, Biotechnology   |
| • Prof. Alok Sharma     | HOD, Architecture            |
| • Dr. P K Sharma        | Librarian, Central Library   |
| • Smt. Sandhya Banerjee | Librarian, Central Library   |

**4.2.2 Provide details of the following:**

**\*Total area of the library (in Sq. Mts.):** 797 Sq Mt

- Ground Floor 487.6 Sq Mt
- Reading Room First floor 222.6 Sq Mt
- IT/E-Journals Access room 86.8 Sq Mt

**\*Total seating capacity :** 120 persons

**\*Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**

Working hours are from 10:00 AM to 5:20 PM throughout the year.

**\*Layout of the library ( individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e- resources)**

Please see Annexure VI for library layout

**4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.**

The amount spent on procuring new books, journals and e-resources during the last four years.

Library Holdings	2016-17		2015-16		2014-15		2013-14	
	Volumes	Amount	Volumes	Amount	Volumes	Amount	Volumes	Amount
Text Books	6198	26,48,061	3736	1338772	1330	440490	316	209979.00
Reference Books	204	12,14,919	-	-		200000	-	-
Magazines/ Newspapers	19+22 Newspaper	43,650	13+22 Newspaper	35000	13+ 22 Newspape r	35000	13+ 22 Newspape r	35000
e-resources	275	9,62,818	630+	800000	375+	10,0000	630+	1165456
RFID implementat ion	-	-	Under process	150000	13000 RFID tags	1,80,000	35000 RFID tags + All RFID Peripherals	15,00,00 0

**4.2.4. Provide details on the ICT and other tools deployed to provide maximum access to the library collection?**

- \* **OPAC:** Online public Access Catalogue facility is available on the individual dashboard of students, research scholars and faculty members. Anyone can search the entire collection by the author/Title/Publisher/year on the dashboard.
- \* **Electronic Resource Management package for E-Journals:** Library has a vast collection of International E-Journals. At present the library has a

collection of 630+ E-journals from IEEE, Sciencedirect, ASME & ASCE memberships.

- \* **Federated searching tools to search articles in multiple databases:** Not available
- \* **Library Website:** Dashboard of ERP portal provides all the facility like library OPAC, individual transaction status & latest arrivals information to the users
- \* **In-house remote access to e-publication:** At the present library has an in-house access facility for students and faculty members, but in future library will try to provide remote access facility to research scholars and faculty members by the help of Easyproxy by OCLC or some other software.
- \* **Library Automation:** Central Library has recently automated their library services; now in Gwalior region MITS Central Library is the first one, which implements RFID technology with international security standards like ISO-15693/ISO 18000-3, relaying on 13.56 MHz. In last 1 ½ years, more than 53,651 books were issued/reissued to various UG/PG students. It is an automatic data capture technology that uses tiny microchips and miniature antennas affixed to the documents. RFID plays a vital role in redefining the library processes to make everyone's job easier, right from the users to the library staff.  
Now for issuing books from library, students have to show their smart card at the circulation counter. All the books are already tagged with latest RFID technology. After completing transaction from circulation counter, student get the issue/return status of books on their mobile through SMS or can download their transaction status from their individual Dashboard by expanding MY Books Issued Status tab.
- \* **Total number of computers for public access:** Library Computer Lab has 15 Computers.
- \* **Total number of printers for public access:** 01
- \* **Internet band width:** 100 MBPS
- \* **Institutional Repository :** Available
- \* **Content Management System for E-Learning:** Library Staff is in the process to attend workshops/ training by competent authorities for developing e-learning packages.



- \* **Participation in resource sharing networks/ consortia:** Library has membership of DELNET consortium and provide their bibliographical details to Develop library Network.

### **MITS Library Services to Students, Faculty & Staff Memebrs**

#### **4.2.5. Provide details on the following items:**

- **Average No of Walk-ins** : 250-300 per day
- **AverageNo of Books issued/Returned** :500 per day
- **Ratio of Library Books to students** :1:5
- **Average no of books added 3 yrs** :15,000 to 17,500
- **Average number of login to OPAC** :175-200 per day
- **Average no of login to e-resources** :3000 + hits per month
- **Average no of e-resources downloaded/printed:**1500 + download per month
- **Information literacy training organized** :Nil
- **Details of Weeding Out of books and other materials:** Books weed out nil in last three years. Newspaper and Magazine Weed out: previous 3 yrs magazines & Newspapers

#### **4.2.6 Give details of the specialized services provided by the library**

- **Manuscripts** : Nil
- **Reference** :Yes
- **Reprography** : Yes
- **ILL** :Yes(toDept.Libraries& DELNET)
- **Information deployment and notification** :Yes
- **Download** :Yes
- **Printing** :Yes
- **Reading list/Bibliography compilation** : Yes
- **In-house/remote access to e-resources** :Yes
- **User Orientation and Awareness** : time to time
- **Assistance in searching Databases** : Individually by Librarian

**INFLIBNET/IUC facility** :INDEST&DELNET, shodganga/shodgangotri consortium accessing facility.

#### **4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

The library staff provides full support to the students and staff in searching books, e-journals, referrals& reference services.

#### **4.2.8 What are the special facilities offered by the library to the visually/ physically challenged persons? Give details**

Library has magnifying glasses for visually challenged persons and barrier free slope for physically challenged persons.

#### **4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?):**

From time to time, the library committee of institution takes feedback from the students and faculty members about the services of library and on the basis of suggestions library committee try to implement the services required by the students and faculty members.

### **4.3 IT Infrastructure**

#### **4.3.1. Give details on the computing facility available (hardware and software) at the institution.**

**\*Number of computers with Configuration (provide actual number with exact configuration of each available system)**

The institute has computers with the following configuration:

- Core i7, 2 GB RAM, 500GB HDD (100 nos)
- Core i5, 2GB RAM, 500GB HDD (100nos)
- Core i3, 1GB RAM, 500GB HDD(100nos)
- Core2 Due, 1GB RAM, 500GB HDD(70nos)
- Dual Core, 1GB RAM, 250GB HDD(75nos)
- Pentium, 1GB RAM, 250GB HDD(70nos)

\* **Computer-student ratio:**1: 4

\* **Stand alone facility:** All are on Local Area Network

\* **LAN facility:** Available

\* **Wi-Fi facility:** Wi-Fi facility is available through-out the campus including hostel

\* **Licensed Software:** All systems are purchased with window license.LAN is being maintained on Linux , Freeware, like STAR-OFFICE is being used for documents and presentations. All departments are having a sufficient number of license software relevant to their Programmes and research.

\* **Number of nodes/computer with internet facility:** All desktops and laptops are on LAN

\* **Any other:** All departments are having sufficient number of computer peripherals like printers, scanners etc to meet their need.

#### 4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?

The Institute is having 24x7 100MBPS leased line through National Knowledge Network (NKN). MHRD, New Delhi. All computers are on internet through LAN. The internet is being distributed through Linux based SQUID Proxy(which is a freeware).

#### 4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

Following are the plans for upgrading IT infrastructure:

- To procure high-end server for educational and research computations.
- To procure more computers to meet out increasing intake of students.
- To upgrade the Central Computer Centre with latest desktops.
- To enhance modern teaching aids in all classrooms and instruction-rooms
- To enhance support for online lectures in classrooms.
- To develop infrastructure for preparing video lectures.
- To upgrade laboratories for high-end research in all engineering fields.

#### 4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years).

The year wise budget for central computational facilities:

Year	2013-14	2014-15	2015-16	2016-17
Amount	15 lacs	15 lacs	15 lacs	Approx 58 lac

Approximately Rs.twocrores is utilized to procure items related with computers from TEQIP-II fund of world bank.

#### 4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

- Most of the classrooms are equipped with projectors and audio-visual aids
- Online conferences and workshops are being held in collaboration with IIT

Mumbai under NME-ICT project. Special lab/classroom is dedicated for this purpose.

- Regular online lectures are being held in collaborations with MOOC and NME-ICT.
- Faculty members are using NPTEL video lectures for instructing students and upgrading themselves.

**4.3.6: Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc) by the Institution place the student at the center of teaching-learning process and render the role of a facilitator for the teacher.**

- The following two courses are being taught online from IIT Bombay:
  - \* Thermodynamics
  - \* Computer Programming
- NPTEL Lectures are shown to the students.
- Online faculty development Programmes have been organized in collaboration with different IITs under the A-VIEW project of NME-ICT.

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

Yes, the Institute is directly having full featured 24x7 100MBPS leased line internet connectivity through National Knowledge Network (NKN). MHRD, New Delhi.

#### 4.4 Maintenance of Campus Facilities

**4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

S.No.	Infrastructure	Expenses in (lakhs)			
		2013-2014	2014-2015	2015-2016	2016-17
1	Building	7.0	7.50	7.50	10.00
2	Furniture	1.20	1.10	1.20	2.00
3	Equipment	2.40	2.90	3.00	3.5
4	Computers	11.50	12.00	10.00	10.00
5	Vehicles	2.5	2.5	3.00	3.00
6	Any Others: As per the requirement of different department and	4.50	6.00	5.00	7.00

	electrical maintenance			
--	------------------------	--	--	--

**4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**

- By appointing plumber, mason, gardner and labour for routine maintenance work
- Through contractor for major maintenance work.

**4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/ instruments?**

The equipments in the labs are monitored by the Lab assistant. The lab assistant checks the working of these equipments on regular basis and if any corrective measure or calibrations are required, reports to Prof.in-charge. Prof. in charge takes an appropriate action immediately and reports to head of department who forward this to the Director. Director of institute release the fund for repairing/ maintenance of equipments. The lab assistant also ensures safety & preventive measure to the students during the practical classes. The daily report of the lab is submitted by lab assistants to the in-charge.

**4.4.4 What are the major steps taken for allocation, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

- The institute has got high powered Gensets for back up and UPS to cater for voltage fluctuation and constant power supply. The institute has 33 kV power supply to overcome voltage fluctuations.
- The generators available in the institute help in continuous power supply without any hindrance.
- The computer systems and other sensitive equipments are provided with UPS systems so that power failure do not cause any damage.
- All precautions are taken to protect the precision equipment by providing voltage stabilizers and individual MCBs. Covers are provided where-ever needed to keep the sensitive equipment in dust free environment.
- The college electrician and the supporting staff are responsible for the upkeep of electrical equipments and their maintenance.
- The institution has a separate RO system to ensure pure water supply for students and faculty.

## CRITERION V: STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Mentoring and Support

**5.1.1 Does the institution publish its updated prospectus/handbook annually? If “yes”, what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?**

Yes, the institution publishes its prospectus annually and it includes following contents:

- Brief history of the each department
- Programmes offered by the departments
- Faculty profile of each department
- Infrastructure available in various departments
- Achievement of faculty members and students in academics, research and co-curricular and extra-curricular activities
- List of eminent alumni
- Department wise placement record of the students
- Common facilities available in the institute

The performance of students and faculty members, infrastructure modernization and upgradation of various departments is monitored by various committees constituted by the Director and report is submitted to BOG members in meetings held annually for taking corrective measures and necessary actions. Thus, the institute is accountable for each record concerned with faculty, students and other facilities generated in the campus.

**5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?**

The institute endows various scholarships for meritorious, physically disabled, underprivileged and reserved category students as follows:

S.No.	Type of Scholarship	Financial Year	No. of Students	Amount	Remark
1	Handicapped	2012-13	12	4,47,600.00	Distributed
2	Handicapped	2013-14	10	3,53,000.00	Distributed
3	Handicapped	2014-15	08	2,98,400.00	Distributed

4	Handicapped	2015-16	10	3,53,000.00	Pending
5	Handicapped	2016-17	01	37,300.00	In Process
6	Alumni	2014-15	05	50,000.00	Distributed (Started from FY-2014-15)
7	Alumni	2015-16	05	50,000.00	Distributed
8	Alumni	2016-17	In process		
9	Memorial	2012-13	10	81,660.00	Distributed
10	Memorial	2013-14	In process		
11	Memorial	2014-15	In process		
12	Memorial	2015-16	In process		
13	Memorial	2016-17	In process		
14	Merit Schlorship	2012-13	146	In process	
15	Merit Schlorship	2013-14	36	In process	
16	Merit Schlorship	2014-15	53	In process	
17	Merit Schlorship	2015-16	In process		
18	Merit Schlorship	2016-17	27	In process	
19	National Scholarship Portal	2015-16	92	In Process (Started from FY-2015-16)	
20	National Scholarship Portal	2016-17	75	In Process (Started from FY-2016-17)	
21	MP Scholarship Portal (SC+ST+OBC)	2012-13	325+202 +333 =860	9988180.00+6226028+9508235.00 =25722443.00	
22	MP Scholarship Portal (SC+ST+OBC)	2013-14	348+171 +400 =919	12219451.00+6658260.00+12322065.00 =31199776.00	
23	MP Scholarship Portal (SC+ST+OBC)	2014-15	326+156 +427 =909	14000180.00+7085655.00+15166681.00 =36252516.00	
24	MP Scholarship Portal (SC+ST+OBC)	2015-16	In Process		
25	MP Scholarship Portal (SC+ST+OBC)	2016-17	In Process		

Yes, the financial aid is disbursed to the students in time.

**5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?**

About 51% percentage of students receives financial assistance from the state government, central government and other national agencies.

#### **5.1.4 What are the specific support services/facilities available for**

- **Students from SC/ST, OBC and economically weaker sections**
- **Students with physical disabilities**
- **Overseas students**
- **Students to participate in various competitions/National and International**
- **Medical assistance to students: health centre, health insurance etc.**
- **Organizing coaching classes for competitive exams**
- **Skill development (spoken English, computer literacy, etc.,)**
- **Support for “slow learners”**
- **Exposures of students to other institution of higher learning/Corporate / business house etc.**
- **Publication of student magazines**

The institute provides all the necessary facilities to the students as per government norms.

- The reservation policy for ST/SC and OBC students is followed as per the state government norms during admission process.
- Tuition fee is waived off for the SC/ST and OBC students.
- Extra facilities are given by institutional library and every year umpteen number of books are purchased from the grant received from the state government.
- Stationery items with calculators are given to the SC/ST students.
- Seats are reserved at the time of admission in various Programmes for physically disabled students. The college makes sure that the classes of such students are held at ground floor to the possible extent. Ramps and separate sanitary facilities are being provided.
- Students are trained by physical trainer and participate in various sports at regional and national level. They are also encouraged to take part in co-curricular and extra-curricular activities.
- Institute is having medical dispensary facility for health problems and a full time doctor is appointed. Also, institute has a tie up with nearby Birla hospital in case of emergency hospitalization.
- Training and Placement Cell organizes aptitude and reasoning classes for the students preparing for competitive examinations.



- Special classes for spoken English, personality development, and computer literacy are organized by Training and Placement cell.
- Remedial classes are being organized for slow learners to improve the transition rate of each semester.
- Students are encouraged to attend workshops, seminars and conferences in IITs, NITs and other reputed research institutes.
- Institute provides financial assistance to publish magazines (Alekh) by the students.

**5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

Entrepreneurship Development Cell was developed in October, 1988 at the institute by the support provided by National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science & Technology, Government of India, New Delhi to organise Entrepreneurial activities for the benefit of students of Science & Technology as well as unemployed educated urban / rural youths. Cell has organized following training/ Programmes for students:

- Entrepreneurship Development Programmes.
- Technology Based Entrepreneurship Development Programmes on Computer Hardware Maintenance, Assembling and Networking Technology.
- Technology Based Rural Entrepreneurship Development Programmes (TREDP / REDP).
- Skill Development Programmes on Repairing, Maintenance and Servicing of TRACTORS.
- Technology Based Rural Entrepreneurship Development Programmes (TREDP) on Food Processing Industries.
- Technology Based Rural Entrepreneurship Development Programmes (TREDP) on Horticulture and Food Processing.
- Entrepreneurship Development Programmes (EDPs).
- TEDPs & Skill Development Programmes on various Trades for SC/ST Educated Youths.
- Training Programme for PMEGP Beneficiaries.
- Entrepreneurship Awareness Camps.
- Skill Development Training Through Science & Technology (STST).

- Medical Representative Development Training Programme.
- Certificate Course on Hospital Management.
- Certificate Course on Computer Hardware / Networking Training.
- Certificate Course on Computer Orientation and Communication Skills .
- Certificate Course on Mobile Phone Repairing and Servicing.
- Training Programme for PMRY Beneficiaries.
- Seminars, Workshops, Extension Lectures on different topics.

**5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.**

- \* **Additional academic support, flexibility in examinations**
- \* **Special dietary requirements, sports uniform and material**
- \* **Any other**

The institute has designated Dean, Students Welfare for promoting and organizing the extracurricular and co-curricular activities. Quiz, debate, poem recitation, technical discussions, poster presentation competitions are regularly organized every year by the students.

Similarly, with the discussion of the Dean Sports, sports officers prepare sports calendar every year and accordingly events are organized at the college level. The winner team of college is further promoted to participate in inter college, regional and national level competitions. The external trainer is appointed to strengthen the team to compete at higher level.

NCC officer is deputed in the institute to organize camps and provide training to the students.

- \* **Additional academic support, flexibility in examinations:** Flexibility in attendance is given to the participants involved in such activities.
- \* **Special dietary requirements, sports uniform and materials:** Adequate diet is given to the cadets/ participants during the camps/ events. The students are also provided with uniform and necessary materials.
- \* **Any other:** Medical facilities are made available to such students.

**5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.**

- The syllabus is modified from time to time in line with technological advancements and made at par with the syllabus of GATE and NET exams. This

upgradation is conducted in consultation with the members of the BOS, comprising of experts from education and industry offering their expert opinions.

- The students are encouraged and sponsored to attend the trainings conducted in-house and outside to learn the techniques beyond the syllabi.
- Experts from the institutes of national repute are invited to deliver lectures on current advances in various fields.
- Regular online lectures are being held in collaboration with MOOC and NME-ICT.
- Teaching through NPTEL video lectures for delivering updated contents to the students.

By providing such support to the students in preparing for competitive exams, a significant number of students are able to qualify GATE and NET exams as shown in table:

S.No.	Name of Department	Year/ No. of Students Qualified in Competition			
		2013	2014	2015	2016
1	Mechanical Engineering	30	27	23	28
2	Electrical Engineering	23	21	19	20
3	Civil Engineering	19	17	11	07
4	Chemical Engineering	12	10	06	05
5	Electronics Engineering	19	15	10	16
6	Biotechnology	14	10	05	06
7	Architecture	13	10	09	01
8	Computer Science and Information Technology Engineering	17	11	10	10

Apart from these, students also qualify in GRE/TOEFL/GMAT/CAT examinations.

#### **5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)**

Faculty members/ class coordinators/ mentors counsel the students as per the academic, psycho-social & personal needs of the students. The faculty identifies the students who need counseling through regular interactions and discuss their problems and weaknesses, whether personal or educational. Besides this all the students are counseled by the Director, HODs and faculty members in general from time to time during regular academic interactions. Other academic, personal

and psycho-social support and guidance services offered by the institute are:

- Guest lectures by eminent people from industries/other academic institutions are arranged at regular intervals.
- Personality grooming classes are organized by Training and Placement cell for the students.
- The Institute sponsors and encourages the students and the faculty to present research papers in national and international seminars/workshops.
- The Institute organizes seminars and workshops by eminent professionals in their respective areas, wherein the student and faculty community actively participate to reach their benefits.
- Motivational lectures and meditation classes are conducted free of cost for stress management.

**5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If “yes”, detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the Programmes).**

Institute has dedicated a student Placement Cell that handles all aspects of training & placements services for the graduating students of all departments, right from contacting companies to managing all logistic arrangements for tests, pre-placement talks and conducting final interviews. The Training and Placement Cell officials and volunteers provide their best possible assistance to the recruiters.

Training & Placement Office provides the infra-structural facilities to conduct group discussions, tests and interviews besides catering to other logistics. The office interacts with many industries in the country, so that many companies visit the campus for recruitment. The industries which approach the institute come under the purview of:

- Core engineering industries
- IT & IT enabled services
- Manufacturing Industries
- Consultancy Firms
- R & D laboratories
- Pharmacy & Bio-Tech Companies etc.

**5.1.10. Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

Yes, institute has a focused mechanism for redressal of grievances with reference to academic and personal level.

The academic redressal of grievances is made through the faculty members. They show

evaluated copies of mid – semester examinations to the students in the class. Student can ask the teacher if he/she has any doubt in evaluation. The teacher clarifies doubts regarding evaluation. Internal marks are displayed on the notice board to enable discussion with the subject teacher/ Faculty Advisor and the HoD in the case of any disagreement.

Within stipulated days of the announcement of the end semester examination results, students can apply for revaluation/rechecking by filling a form through the registrar of the institute. If the student is not satisfied with revaluation result, there is provision of spotvaluation after forwarding application from director for speedy redressal of grievances.

There is a special counseling cell to sort out the personal grievances of girl students. Dr. Archana Tiwari, Professor, Civil Engineering, is the chairperson of the counseling committee. The committee members organize meetings with girl students and take corrective measures.

Anti ragging committee is actively working to maintain harmonious environment in the institute.

No grievances have been reported till date.

#### **5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

Women grievances cell of the institute deals with the issues related to sexual harassment. Dr. Archana Tiwari, Professor, Civil Engineering, is the chairperson of the committee. The other members of the cell are:

- Dr. S. Wadhwani
- Dr. Anjali Patil
- Dr. Karuna Markam
- Prof.Neha Bhardwaj
- Mrs. Pallavi Srivastava

**Functions of the cell:** The office of the cell is a complaint centre for the members of the campus community who have been sexually harassed. The functions of the cell are:

- To look into the complaints by informal and formal means to resolve the issues.
- To ensure fair and timely resolution cases of sexual harassment.
- To provide information regarding counseling and support services in the campus.
- To foster a respectful work and learning environment.

No such cases are reported yet.

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

Yes, institute has a well defined mechanism to resolve any issue related to ragging. As per the directions of the Hon'ble Supreme court and notification of AICTE, New Delhi an anti ragging committee is constituted involving senior faculty members, representatives of parents, representatives of students belonging to fresher category and senior students.

Anti ragging squads are active in campus throughout the day to ensure prevention of any such activity is not taking place. Apart from this, anti ragging committee members are actively performing their duties thrice a day. No, such instances have been reported during the last four years.



**MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR - 05**

Ref. No.: 2596.

Date: 9/8

**ORDER**

First year B.E./B.Arch classes will start with 17<sup>th</sup> August 2012. The following faculty & staff members are directed to assemble, as per given schedule in the porch (Main Entrance) and take a round under the guidance of Group Leader (in case of absence of Group Leader, very next present member will act as a Group Leader) and report back to Group Leader to ensure that the newly admitted students are not being ragged or students.

DAY	09:45 AM to 10:15 AM		1:10 PM to 2:20 PM		04:30 PM to 5:15 PM	
MON	1.	Dr. Shriram Prasad	1.	Prof. A.K. Dwivedi	1.	Prof. Manish Dixit
	2.	Prof. Vikas Sejwar	2.	Dr. Vikas Shinde	2.	Prof. H.M. Dubey
	3.	Prof. Vedansh Chaturvedi	3.	Prof. Sumint S. Trivedia	3.	Prof. Abhilash Sonkar
	4.	Prof. Kuldeep Swarnkar	4.	Dr. B.P.S. Bhadouria	4.	Prof. Avadesh Sharma
	5.	Mrs. Sangita Arora	5.	Mrs. Shubhra Shrivastava	5.	Mr. Shailendra S. Bhadoria
	6.	Mr. Praveen Gupta	6.	Mrs. Shashi Goel	6.	Mr. Gajanan Pophli
	7.	Mr. Vishal Shinde	7.	Mr. Rajesh Tomar	7.	Mr. R.P. Gupta
	8.	Mr. M.S. Kushwah	8.	Mr. Love Sharma	8.	Mr. Bharat Sakwar
TUE	1.	Prof. A.K. Dwivedi	1.	Prof. C.S. Malvi	1.	Prof. Ashish Patra
	2.	Prof. R.P. Kori	2.	Prof. Vikas Sejwar	2.	Prof. Chandrabhan Seniya
	3.	Prof. R.P. Narwaria	3.	Prof. Jaimala Jha	3.	Prof. Abhilash Sonkar
	4.	Prof. Sumint S. Trivedia	4.	Prof. Gautam Bhadoria	4.	Prof. Kuldeep Swarnkar
	5.	Mrs. Rajni Sharma	5.	Mr. Y.D. Jaital	5.	Mr. Shailendra S. Bhadoria
	6.	Ms. Priyanka Bhadoria	6.	Mr. K.S. Dubey	6.	Mr. D.S. Tomar
	7.	Mr. V.S. Kushwah	7.	Mr. A.K. Chauhan	7.	Mr. Vishal Shinde
	8.	Mr. M.K. Golya	8.	Mr. Beerbal Jatav	8.	Mr. M.S. Kushwah
WED	1.	Dr. Sulochana Wadhvani	1.	Prof. Laxmi Shrivastava (Elex)	1.	Prof. Rekha Gupta
	2.	Prof. A.S. Patil	2.	Prof. Vijay Bhuria	2.	Prof. C.S. Malvi
	3.	Prof. Khushboo Agrawal	3.	Dr. Sunita Sharma	3.	Prof. Angad S. Ojha
	4.	Prof. Sumint S. Trivedia	4.	Prof. Akhilesh Tiwari	4.	Prof. Punit K. Johari
	5.	Mr. M.L. Sahu	5.	Mr. Deepak Soni	5.	Mr. Shailendra Bhadoria
	6.	Mr. S.K. Saxena	6.	Mr. Devendra Singh	6.	Mr. R.S. Yadav
	7.	Mr. Sujan Singh	7.	Mrs. Jyotsna Singh	7.	Mr. Sanjay Tiwari (Mech.)
	8.	Mr. Y.D. Jaital	8.	Mr. Love Sharma	8.	Ms. Renu Gupta
THU	1.	Prof. Bimal Garg	1.	Dr. Shriram Prasad	1.	Dr. Anshu Chaturvedi
	2.	Prof. Shishir Dixit	2.	Dr. Anjula Gaur	2.	Prof. Rakesh Narvey
	3.	Prof. Jyoti Vimal	3.	Dr. S. Bhattacharya	3.	Dr. Sunita Sharma
	4.	Prof. Gautam Bhadoria	4.	Prof. Himmat S. Ahirwar	4.	Prof. Manish Sagar
	5.	Mr. Prafull Dubey	5.	Mr. V.S. Kushwaha	5.	Mr. R.K. Dixit
	6.	Mr. M.D. Gaur	6.	Mr. Praveen Gupta	6.	Mrs. Sangita Arora
	7.	Mr. S.R. Das	7.	Mr. R.K. Mishra	7.	Mr. R.S. Yadav
	8.	Mr. R.P. Gupta	8.	Mr. Love Sharma	8.	Mr. Shankar Banarjee
FRI	1.	Prof. D. Rastogi	1.	Prof. Chandrabhan Seniya	1.	Prof. Bimal Garg
	2.	Prof. Manish Dixit	2.	Prof. Jitendra Mutehe	2.	Dr. D.K. Jain
	3.	Prof. Hotam S. Chaudhry	3.	Prof. Angad S. Ojha	3.	Prof. Punit-K. Johri
	4.	Prof. Poonam Sharma	4.	Prof. Y.P.S. Maravi	4.	Prof. Avadesh Sharma
	5.	Mr. S.K. Saxena	5.	Mr. M.D. Gaur	5.	Mr. Praveen Gupta
	6.	Mrs. Jyotsna Singh	6.	Mr. Rajesh Sharma	6.	Mr. R.K. Dixit
	7.	Mr. Sujan Singh	7.	Mr. Sanjay Tiwari (Mech.)	7.	Mr. S.R. Das
	8.	Mr. Beerbal Jatav	8.	Mr. Bharat Sakwar	8.	Mrs. Rajni Sharma
SAT	1.	Prof. Angad S. Ojha	1.	Prof. Rekha Gupta	1.	Prof. D. Rastogi
	2.	Prof. Rakesh Narvey	2.	Dr. Anjula Gaur	2.	Dr. Sanjeev Khanna
	3.	Prof. Khushboo Agrawal	3.	Prof. Vijay Bhuria	3.	Prof. Jyoti Vimal
	4.	Prof. Vedansh Chaturvedi	4.	Prof. Sanjeev Sharma	4.	Prof. Y.P.S. Maravi
	5.	Mrs. Shiva Patel	5.	Mrs. Shubhra Shrivastava	5.	Mr. R.K. Mishra
	6.	Mr. Vishal Shinde	6.	Mr. R.S. Yadav	6.	Mr. K.S. Dubey
	7.	Mr. Beerbal Jatav	7.	Mr. M.D. Gaur	7.	Mr. M.K. Golya
	8.	Mr. Deepak Soni	8.	Mr. Rajesh Sharma	8.	Mr. M.S. Kushwaha

**Group leader of each slot is required to fill up the proforma (available with the PA to undersigned) after each and every anti ragging duty and submit the same in the office of the undersigned.**

(Dr. Sanjeev Jain)  
Director

- Copy to -
- 1 All Concerning Member/Dean/HOD/Sec. Incharge/ Hostel Wardens for information & necessary action
  - 2 Security Incharge
  - 3 All Notice Boards
  - 4 Director office for information
  - 5 Dean Administration/Establishment

### **5.1.13 Enumerate the welfare schemes made available to students by the institution.**

Welfare schemes made available for students are listed below:

- Merit scholarships and fee concessions for deserving students.
- Awards to class toppers.
- Travel grants to participate in competitions and conferences.
- Closed car parking and two wheeler parking facilities.
- Transport facility to all points in Gwalior and neighboring towns.
- Subsidized canteen which supplies hygienic and nutritious food.
- Medical dispensary and free consultation by the doctor.
- Ambulance facility during medical emergencies.
- Provision for insurance and accident policy.
- In the campus, bank facility, courier services, stationery and photostat facility are available.
- Provision of well-furnished rooms in hostels at minimized rates.

### **5.1.14 Does the institution have a registered Alumni Association? If “yes”, what are its activities and major contributions for institutional, academic and infrastructure development?**

Yes, the alumni association is registered. Reunion of silver jubilee pass out batch is organized annually in December each year. It provides an opportunity for interaction between the alumni and institute, paves way for participation of alumni in development of institute. Alumni scholarship is awarded to meritorious students. At the departmental level, alumni are associated in various activities as follows-

1. Alumni are opted as members of board of studies. Their valuable suggestions are given due consideration while finalizing scheme and syllabi
2. Invited as keynote speaker/expert lecture in workshop/seminar for the benefit of the students.
3. Associated in the organization of educational tours of students

In mechanical engineering department, an excellence centre “SKF Asset Reliability Centre” Pune is established by the support of alumni.

Business Development service centre is set up with the support of prominent alumni. BDS centre is involved in problem solving related to business and industries.



## 5.2 Student Progression

### 5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.

The following data shows that students of the institute are placed through campus selection in various reputed companies:

Student Progression (%)						
Year	Campus Selection		UG to PG	PG to M.Phil.	PG to PhD	Other Employed
	UG	PG				
2012	64.13	23.38	30	-	25	10
2013	16.94	0.64	50	-	38	15
2014	50.11	12.21	41	-	36	16
2015	58.56	19.7	35	-	20	15
2016	32.33	30	25	-	13.73	-

Other students are employed in various firms like banking sector, PSUs, PSCs, engineering services and private firms, etc. or opted for higher education in other institutes like IIT, NITs or research institutes.

### 5.2.2 Provide details of the Programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish Programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.

The following table shows Programme wise pass percentage and completion rate for the last four years:

B.E./MCA/B.Arch. Madhav Institute of Technology & Science, Gwalior (M.P.)												
	2008-12			2009-13			2010-14			2011-15		
Branch	In Take	Degree Completed in 2012	% Pass	In Take	Degree Completed in 2013	% Pass	In Take	Degree Completed in 2014	% Pass	In Take	Degree Completed in 2015	% Pass
Civil Engineering	50	42	84.00	50	42	84.00	50	47	94.00	60	48	80.00
Mechanical Engineering	65	54	83.08	65	51	78.46	65	61	93.85	65	58	89.23
Electrical Engineering	65	54	83.08	65	50	76.92	65	58	89.23	65	60	92.31
Electronics Engineering	60	50	83.33	60	54	90.00	60	53	88.33	60	57	95.00
Computer Science and Engineering	60	43	71.67	60	49	81.67	60	56	93.33	60	53	88.33
Information Technology	60	46	76.67	60	45	75.00	60	46	76.67	60	57	95.00
Chemical Engineering	30	24	80.00	30	23	76.67	30	24	80.00	30	21	70.00
Biotechnology	30	15	50.00	30	20	66.67	30	20	66.67	30	10	33.33
MCA	60	48	80	60	48	80	60	57	95	60	48	80
B.Arch.	40	24	60	40	27	67.50	40	37	92.50	40	40	100

<b>M.E./M.Tech.</b>												
	<b>20010-12</b>			<b>20011-13</b>			<b>2012-14</b>			<b>2013-15</b>		
<b>Branch</b>	<b>In Take</b>	<b>Degree Completed in 2012</b>	<b>% Pass</b>	<b>In Take</b>	<b>Degree Completed in 2013</b>	<b>% Pass</b>	<b>In Take</b>	<b>Degree Completed in 2014</b>	<b>% Pass</b>	<b>In Take</b>	<b>Degree Completed in 2015</b>	<b>% Pass</b>
<b>CTM</b>	25	04	16	25	02	8.00	25	01	4.00	25	07	28.00
<b>ST</b>	07			07			07			07	01	14.29
<b>ENV</b>	12			12			12			12		
<b>PN</b>	18	06	33.33	18	03	16.67	18	01	5.56	18	05	27.78
<b>MH</b>	21	13	61.90	21	03	9.52	21			21	04	19.05
<b>ISD</b>	25	20	80.00	25	16	64.00	25	23	92.00	25	17	68.00
<b>MAC</b>	12	10	83.33	12	10	83.33	12	11	91.67	12	05	41.67
<b>CCN</b>	25	14	56.00	25	19	76.00	25	11	44.00	25	15	60.00
<b>MW</b>	18	03	16.67	18	10	55.56	18	18	100.00	18	08	44.44
<b>CSE</b>	18			18	04	22.22	18	08	44.44	18	02	11.11
<b>IT</b>	18			18			18	07	38.89	18	01	5.56
<b>CM</b>	18			18			18			18	05	27.78
<b>BT</b>	18	13	72.22	18	13	72.22	18	02	11.11	18	07	38.89
<b>CTM (PT)</b>	05			05			05	01	20.00	05		

As per the results shown in the table, the performance of the students has improved with that of previous results of the institute and that of the colleges of the affiliating university.

### 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

- Institute offers following postgraduate courses, which encourage students to pursue higher education.

Year of start	Name of Programme
<b>Department of Civil Engineering</b>	
1986	M.E. Construction Technology & Management
2003	M.E. Structural Engineering.
2003	M.E. Public Health Engineering
2014	M.Tech. Geo Informatics
2014	M.Tech. Environment Engineering
1987	M.E. Structural Engineering (Part time)
1995	M.E. Construction Technology & Management (Part time)
<b>Department of Mechanical Engineering</b>	
2002	M. Tech. Production Engineering
<b>Department of Electrical Engineering</b>	
1995	M.E. Industrial Systems & Drives
2003	M.E. Measurement & Control
<b>Department of Electronics Engineering</b>	
1995	M.E. Communication Control & Networking
2002	M.Tech. Electronics & Communication (Microwave Engineering)
<b>Department of Computer Science &amp; Engineering and Information Technology</b>	
2011	M.Tech. Computer Science & Engineering
2012	M.Tech. Information Technology
2013	M.Tech. Cyber Security
<b>Department of Chemical Engineering</b>	
2013	M.Tech. Chemical Engineering
<b>Department of Biotechnology</b>	
2004	M. Tech. Biotechnology

- Institute has dedicated student placement cell that guide students to access employers and provide off campus job opportunities. Placement cell in the institute with the coordination of department of humanities and external work forces, organizes personality development sessions regularly.

- Institute also encourages students towards higher education by awarding students who qualify in competitive examinations (GATE, CAT, GRE, NET, etc.)
- Well stocked library with latest books and journals provides latest and comprehensive information to students.
- WiFi facility throughout the campus enables the students to access career prospectives.

#### **5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

- Special classes for spoken English, personality development, and computer literacy are organized.
- Remedial classes are being arranged for slow learners to improve the transition rate in each semester.
- Counseling sessions are organized for weaker students regularly.
- Extra academic facilities such as library, tutorials etc. are provided to students.

#### **5.3 Student participation and activities**

##### **5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and Programme calendar.**

###### **List of the Sports activities at the Institute level:**

###### **Sports Activities- 2013-2014**

- Inter-Collegiate Table Tennis Tournament
- Inter-Collegiate Badminton Tournament
- Inter-Collegiate Chess Tournament
- RGPV Cross Country Championship

###### **Sports Activities- 2014-15**

- Inter-Collegiate Cricket Tournament
- Inter-Collegiate Football Tournament
- Inter-Collegiate Table Tennis Tournament
- Inter-Collegiate Athletics Meet
- Inter-Collegiate Badminton Tournament
- Inter-Collegiate Chess Tournament
- RGPV State Level Table Tennis Tournament

###### **Sports Activities- 2015-16**

- Men's Table Tennis Inter-Collegiate Tournament
- Women's Table Tennis Inter-Collegiate Tournament
- State Level Women's Cross Country Championship
- State Level Men's Cross Country Championship
- Inter-Collegiate Chess Tournament
- Inter-Collegiate Women's Basketball Tournament
- Inter-Collegiate Men's Basketball Tournament
- Inter-Collegiate Women's Badminton Tournament
- Inter-Collegiate Football Tournament

**MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR**  
**(SPORTS)**

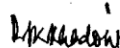
Ref No: *Sports/02/2015*


Date: *15/07/2015*

**Subject:** Sports activities schedule 2015-16

S. No.	Games / Sports	Dates for Events
1	Table Tennis (M&W)	22.07.15 To 31.07.15
2	Badminton (M&W)	01.08.15 To 15.08.15
3	Chess (M&W)	16.08.15 To 31.08.15
4	Cross Country (M&W)	05.09.15
5	Basketball (M&W)	01.09.15 To 15.09.15
6	Football	16.09.15 To 30.09.15
7	Volleyball (M&W)	01.10.15 To 15.10.15
8	Athletics (M&W)	16.10.15 To 31.10.15
9	Cricket	01.11.15 To 15.11.15
10	Kabaddi	16.12.15 To 30.12.15

1. For registration and details contact sports officer at sports office.
2. Selection of college team will be made on the basis of above tournaments to represent the institute at RGPV nodal level/ state level and intervarsity level and others.

  
(Dr. B. P. S. Bhadoria)  
Sports Officer

  
(Prof. J. K. Jain) *15/07/15*  
Dean, Sports

Copy to:

1. Director for information
2. Dean administration for information
3. All HOD's with the request to display at the department notice board.
4. Sports notice board

**MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE, GWALIOR**  
(As Autonomous Institute under RGPV, Bhopal)  
Website : [www.mitsgwalior.in](http://www.mitsgwalior.in)

Date : 30.4.16

**Intramural Sports Tentative Schedule**  
w.e.f. July 2016 to May 2017

S. No.	Sports / Games	Registration Dates	Event Schedule
1.	Table Tennis (M & W)	26 <sup>th</sup> - 30 <sup>th</sup> July 2016	30 <sup>th</sup> & 31 <sup>st</sup> July 2016 06 <sup>th</sup> & 7 <sup>th</sup> Aug 2016
2.	Chess (M & W)	8 <sup>th</sup> - 12 <sup>th</sup> Aug 2016	13 <sup>th</sup> & 14 <sup>th</sup> Aug 2016
3.	Badminton (M & W)	12 <sup>th</sup> - 18 <sup>th</sup> Aug 2016	20 <sup>th</sup> & 21 <sup>st</sup> Aug 2016 27 <sup>th</sup> & 28 <sup>th</sup> Aug 2016
4.	Cross Country (M & W)	25 <sup>th</sup> Aug - 3 <sup>rd</sup> Sept 2016	4 <sup>th</sup> Sept 2016
5.	Basketball (M & W)	2 <sup>nd</sup> - 9 <sup>th</sup> Sept 2016	10 <sup>th</sup> & 11 <sup>th</sup> Sept 2016 17 <sup>th</sup> & 18 <sup>th</sup> Sept 2016
6.	Volley Ball	19 <sup>th</sup> - 23 <sup>rd</sup> Sept 2016	24 <sup>th</sup> & 25 <sup>th</sup> Sept 2016
7.	Football	20 <sup>th</sup> - 28 <sup>th</sup> Sept 2016	1 <sup>st</sup> Oct 2016 8 <sup>th</sup> & 9 <sup>th</sup> Oct 2016 15 <sup>th</sup> & 16 <sup>th</sup> Oct 2016
8.	Handball	10 <sup>th</sup> - 21 <sup>st</sup> Oct 2016	22 <sup>nd</sup> & 23 <sup>rd</sup> Oct 2016
9.	Cricket	24 <sup>th</sup> Oct - 4 <sup>th</sup> Nov 2016	12 <sup>th</sup> to 15 <sup>th</sup> Nov 2016

S. No.	Sports / Games	Registration Dates	Event Schedule
1.	Athletic Meet (M&W)	4 <sup>th</sup> - 13 <sup>th</sup> Jan 2017	14 <sup>th</sup> & 15 <sup>th</sup> Jan 2017 21 <sup>st</sup> & 22 <sup>nd</sup> Jan 2017
2.	Kho- Kho (M&W)	23 <sup>rd</sup> - 27 <sup>th</sup> Jan 2017	28 <sup>th</sup> & 29 <sup>th</sup> Jan 2017
3.	Kabaddi (M&W)	6 <sup>th</sup> - 10 <sup>th</sup> Feb 2017	11 <sup>th</sup> & 12 <sup>th</sup> Feb 2017
4.	3-A-SIDE Basketball Tournament	13 <sup>th</sup> - 17 <sup>th</sup> Feb 2017	18 <sup>th</sup> & 19 <sup>th</sup> Feb 2017
5.	Inter-hostel Cricket Tournament	20 <sup>th</sup> - 24 <sup>th</sup> Feb 2017	25 <sup>th</sup> & 26 <sup>th</sup> Feb 2017 4 <sup>th</sup> & 5 <sup>th</sup> March 2017
6.	Inter-hostel Football Tournament	6 <sup>th</sup> - 10 <sup>th</sup> March 2017	11 <sup>th</sup> & 12 <sup>th</sup> March 2017 18 <sup>th</sup> & 19 <sup>th</sup> March 2017

**Important Instructions:**

1. For Registration and details contact sports officer at sports office.
2. Selection of college team will be made on the basis of above tournaments to represent the Institute at RGPV nodal level, state level, intervarsity level and others.
3. Dates of games/sports are subject to change according to RGPV sports calendar. Separate notice will be issued for any change of dates.
4. Students should regularly check notice board and institute website for updates.

*B.P.S. Bhadoria*  
(Dr. B.P.S. Bhadoria)  
Sports officer



माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर, म.प्र.

क्रमांक/स्पोर्ट्स/०२,

दिनांक: 12/08/2015

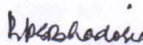
प्रति,

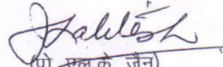
निदेशक,  
समस्त महाविद्यालय ग्वालियर नोडल,  
ग्वालियर

विषय: ग्वालियर नोडल स्तरीय खेलकूद प्रतियोगिता कलेण्डर सत्र 2015-16

क्रं	खेल का नाम	आयोजन दिनांक	आयोजक महाविद्यालय का नाम
1	टेबिल टेनिस म./पु.	21 से 22 अगस्त 2015	आई.टी.एम. ग्वालियर
2	क्रॉस कंट्री म./पु.	11 सितम्बर 2015	एम.आई.टी.एस. ग्वालियर
3	कबड्डी पु.	8 से 9 सितम्बर 2015	एम.आई.टी.एम.(मालवा) ग्वालियर
4	बास्केट बाल म./पु.	14 से 15 सितम्बर 2015	एम.आई.टी.एस. ग्वालियर
5	शतरंज म./पु.	12 से 13 अक्टूबर 2015	एस.आर.सी.ई.एम बानमौर
6	बेसबॉल म./पु.	8 जनवरी 2016	एम.आई.टी.एस. ग्वालियर
7	व्हाली बाल म./पु.	28 से 29 सितम्बर 2015	एम.पी.सी.टी. ग्वालियर
8	जूडो म./पु.	14 से 15 जनवरी 2015	आई.पी.एस. ग्वालियर
9	बैडमिंटन म./पु.	8 से 9 अक्टूबर 2015	आई.पी.एस. ग्वालियर
10	हैडबॉल म./पु.	24 से 25 सितम्बर 2015	एम.आई.टी.एस. ग्वालियर
11	तैराकी म./पु.	21 से 22 सितम्बर 2015	आर.जे.आई.टी. टेकनपुर
12	एथलेटिक्स म./पु.	2 से 3 नवम्बर 2015	एम.आई.टी.एस. ग्वालियर
13	नेटबॉल म./पु.	23 से 24 नवम्बर 2015	एम.आई.टी.एस. ग्वालियर
14	टेनिस म./पु.	26 से 27 नवम्बर 2015	आई.पी.एस. ग्वालियर
15	हॉकी पु.	2 से 3 दिसम्बर 2015	आई.पी.एस. ग्वालियर
16	क्रिकेट पु.	20 नवम्बर से 5 दिस. 2015	वी.आई.टी.एम. (विक्रात) ग्वालियर
17	फुटबॉल पु.	5 से 6 नवम्बर 2015	आर.जे.आई.टी. टेकनपुर
18	खो-खो म./पु.	4 से 5 दिसम्बर 2015	एम.आई.टी.एम.(मालवा) ग्वालियर

1. क्रीडा प्रतियोगिताओं की प्रविष्टि आयोजक महाविद्यालय को टूर्नामेंट के आयोजन से एक सप्ताह पहले भेजनी होगी।
2. खेलो का आयोजन म.प्र. शासन खेलकूद मार्गदर्शिका एवं रा.गा.वि.वि. भोपाल के नियमानुसार करनी होगी।
3. प्रतियोगिताओं में विजयी/उपविजयी एवं व्यक्तिगत वरीयता (मेरिट) प्रमाण पत्र खिलाड़ीयों को आयोजक महाविद्यालय द्वारा प्रतियोगिता स्थल पर ही अनिवार्य रूप से वितरित किये जावेंगे।
4. आयोजक महाविद्यालय द्वारा चयन समिति प्रतिवेदन, प्रतियोगिता परिणाम, प्रतियोगिता सम्पन्न होने पर प्रतियोगिता संबंधी अन्य प्रतिवेदन, अनिर्वाह रूप से नोडल महाविद्यालय में प्रेषित करेंगे।

  
(डॉ. बी.पी.एस. भदौरिया)  
क्रीडा अधिकारी

  
(डॉ. अनिल गोयल)  
डीन स्पोर्ट्स

प्रतिलिपि-

1. निदेशक एम.आई.टी.एस. ग्वालियर।
2. डॉ. अनिल गोयल अधिष्ठाता छात्र कल्याण राजीव गांधी प्रौद्योगिकी विश्वविद्यालय भोपाल।



**List of the Co-curricular activities at the Institute level:**

Activities	Year
Galarío De Photo	2013
Technofiera (Event)	2013
Paper Published- Sniffing HTTPS Using Yamas	2014
Paper Presentation on "ROLE OF SOCIAL MEDIA IN ACEDEMICs" In Nacit	2015
Essaria(Arambh) (Event)	2013
Fun-N-Zeila (Event)-2 <sup>nd</sup> Prize	2014
Best out of waste Under CSI(Event)-1 <sup>st</sup> Rank	2014
Organizer in ISTE(Best Student Chapter Award In MP and CG)	2015
Organized a National Level Event (Make In India)	2015
Code Crunch C,C++	2014
Code-E-Thon	2013
Code C Zar	2013
NPTEL IIT Madras C Programing	2015

**5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal/ National/ International, etc. for the previous four years.**

**Details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc.**

Department of CSE & IT

Sr. no.	Name of Student	Achievements	Year
1.	Rohan Ahuja	Galarío De Photo (Event)-2 <sup>nd</sup> Prize	2013
		Technofiera (Event)- 2 <sup>nd</sup> Prize	2013
		Paper Published- Sniffing HTTPS Using Yamas	2014
		Football State and National Level Player	2014
		Cricket Nodal Winner	2014
		Internship Under Cybercell Police Gudgaun Awarded Best Project on Lacion Tracking	2015
		Football Nodal Silver Winner Representing Gwalior in State Level	2015
2.	Shikha Patel	Table Tennis Nodal Winner And State Player	2013
		Table Tennis Nodal Winner And State Player	2014
		Branch Topper	2014
		Table Tennis Nodal Winner And State Player	2015
3.	Harsh Jaria	Chess Nodal Winner	2012
		Chess Nodal Level-2 <sup>nd</sup> Position	2014
		Chess Nodal Level-3 <sup>rd</sup> Position	2014
		Paper Presentation on "ROLE OF SOCIAL MEDIA IN ACEDEMICs" In Nacit	2015

4.	Anjul Ravi Gupta	2 <sup>nd</sup> Position Essaria(Arambh) (Event)	2013
		Selected in Accenture, Infosys	2015
5.	Mukul Sharma	1 <sup>st</sup> Position in Nodal Chess Championship	2014
		Paper Presentaion on “ Role of Socieal Media In Academics” in Nacit	2015
6.	Mahipal Yadav	Cross Country Event (College Level 2 <sup>nd</sup> )	2015
		Nodal Level 7 <sup>th</sup>	2015
		State Level 10 <sup>th</sup>	2015
		National 777 <sup>th</sup>	2015
		Gwalior Nodal in 400M Race(4 <sup>th</sup> Rank)	2015
		Gwalior Nodal in 10000M Race(3 <sup>th</sup> Rank)	2015
7.	Divya Chandron Vikalp Agrawal	Fun-N-Zeila (Event)-2 <sup>nd</sup> Prize	2014
8.	Divya Chandran Kashish Gahoi Anuj Arya	Best out of waste Under CSI(Event)-1 <sup>st</sup> Rank	2014
9.	Divya Chandron Depak Bamoriya	Antakshari In Aurora Organized By IIITM (Event)-2 <sup>nd</sup> Prize	2013
10.	Shweta Dwivedi	Athletics Nodal 100m Race-2rd Rank	2015
11.	AArti Bhadoriya	State Level Participants in Women Basketball & Cross Country	2015
12.	Rashmi Parashar	State Level Participants In Women Basketball, Table Tennis & Cross Country	2015
13.	Nilesh Kumar Rohan Ahuja Rashmi Parashar	Organizer in ISTE(Best Student Chapter Award In MP and CG)	2015
		Organized a National Level Event (Make In India)	2015
14.	Pragam Gandhi Anshul Sheohaliya Deepak Baghel	Successfully Cleared Asia-Chennai First Round Online Programing Contest	2015
15.	Somya Gupta	Achieved First Position In “ Rifle Shooting” In The Women Empowerment Camp Organized by Shaheed Shashindra Memorial Women Wisdom Society	2014
		Achieved First Position In “Gulel” in The Women Empowerment Camp Organized by Shaheed Shashindra Memorial Women Wisdom Society	2014
		Entitled As”Gwalior little Master Chef” by Central Park	2013
16.	Gaurav Mishra	Chess Nodal-2 <sup>nd</sup> Position	2014

17.	Ravi Kumar	Cricket Tournament-1 <sup>st</sup> Position	2014
18.	Krishna Kumar Agrawal Shivam Tomar	TCS Code Vita- All- India Rank33	2015
19.	Apoorv Mishra Shivam Tomar Deepak Singh Tomar	Aspiration 20-20 by Infosys-Selected Team From MPCG	2014
20.	Krishna Kumar Agrawal	Code Crunch C,C++- 1 <sup>st</sup> Rank	2014
		Code-E-Thon-4 <sup>th</sup> Rank	2013
		Code C Zar- 2 <sup>nd</sup> Rank	2013
		NPTEL IIT Madras C Programming-83 Percentile	
		Test Suhrer	2013
21.	Rajkumar Jain	Got Achievement Award in Microsoft Empowered Classes in The Field of Computer Networks	2015
		Got Consellation in Quiz Contest/story Writing Organized in Internshala	2015
		Published Paper Based on Algorithm in IEEE Conference	2014
		Got 2 <sup>nd</sup> Prize in weekly MEC Referral Challenge Contest	
22.	Akrati Sharma	Paper Published In IJCESR on " A Storage of Database on Cloud With Security Issues" And Was Ranked Third by Google on SEO	2015
23.	Nikita Upadhyaya	Paper Published in IJERMT on " Nature Inspired optimization Algorithms: An Insight to Image Processing Application"	2015
		Paper Published in SERSC on " An Exhaustive Survey on Nature Inspired optimization Algorithms"	2015

#### Department of Chemical Engineering

Sr. no.	Name of the Student	Details of Activity/achievement	Year
1.	Abhishek Bajpai(3 <sup>rd</sup> Year)	1.Lawn Tennis (RGPV lawn tennis team, inter university)	2015
		2. Lawn Tennis(Official ITF futures International tennis Tournament)	2015
		3. Lawn Tennis(College state held at Indore selection in university team)	2015
		4.Lawn Tennis(Gold medal, KVS national sports meet)	2012

		5. Lawn Tennis(Gold medal, KVS national sports meet)	
		6. Lawn Tennis(Quarter finals in MP ranking tennis Championship)	2013

#### Department of Mechanical Engineering

Sr. no.	Name of the Student	Details of Activity/achievement	Year
1.	Sunil Dohare	Received membership of IE, India	2015
2.	Chandan Saxena	Developed Wire free wheel system	2015
3.	Jyoti Dohare	First Prize in Essay Competition District level(santa hare krashna nyas Gwalior)	2011
		First Prize in Essay Competition District level(Nirvachan Ayoge Gwalior)	2014
		Second Prize in Debate Competition (Nirvachan Ayoge Gwalior)	2014
		Second Prize in Leeter Writing Division Level(Mama Manik Chand Smarti Samaroh Nai Sadak Gwalior)	2014
		First Prize in Essay Competition District Level(Nirvachan Ayoge Gwalior)	2015
		Second Prize in Essay Competition at college level D.L.S. sports & social society, Gwalior	2012
4.	Veer Singh Sikarwar	Cited as tops young Poet at MANIT Bhopal	2015
5.	Saurabh Mangal	Third rank in GATE	2012
6.	Avankitak Nigam	Represented Gwalior in Badminton state level Tournament (RGPV)	2014
7.	Sweety Rathore	Gold Medal First Price 400m race in Nodal Zone MITS , Gwalior	2015

#### Department of Biotechnology

Sr.	Name of the Student	Details of Activity/achievement	Year
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no.			
1.	Ekant shama, Yashwant Kushwah, Shailesh Gautam and Ipsita Gosh	Poster on "Microbes can be used as antibacterial paints/dyes" in National Conference on Biotech and Human Welfare: New Vistas Deptt. of biotechnology and VBS Purvanchal University Jaunpur, Banaras U.P.	
2.	Ankita Jain and Priya Dulani	Participated in Basketball RGPV nodal Tournament, MITS, Gwalior	2015
3.	Ankita Jain	Participated in Basketball RGPV StateTournament Indore	2015
4.	Ankita Jain	Participated in Basketball Inter University Tournament held at Jaipur	2015
5.	Bhanu Jaseja and Priyanka Karoriya	Won 2 <sup>nd</sup> prize in Poster Presentation event organized by Architecture Deptt. MITS,Gwalior	2013
6.	Abhishek Shrivastava, Ashish Tilanthe and Mohit Sharma	Participated in Sixth Summer Biotech Training Camp 2013 on Advanced Tissue Culture and Molecular Biology Techniques at HariHar Biotech, Agra	2013
7.	Deeksha Tripathi	Presented a Paper in Aarohan-2013 sponsored by ISTE at MITS, Gwalior	2013
8.	Smriti Gupta	Awarded 'Major Dhyanchand Award' in Karate Sports	2013
9.	Prashant Soni	Won Prize in Quiz Event in 'Manthan' in MITS,Gwalior	2013
10.	Ankita Jain	Was selected for RGPV state level Basketball Competition	2012
11.	Smriti Gupta	Awarded in various Karate Events2 Gold Medals and 1 Silver Medal at International Karate event held at Goa	2012
12.	Prashant Soni	Won Prize in Special Contribution in 'Social Awareness' in "Aurora 2012" at IITM, Gwalior	2012
13.	Abhilash Tiwari, Akash Pawar, Ankit Gupta, Dhawal Tailang	Prize in 'Short Film Competition' in "Aurora 2012" at IITM, Gwalior and won Rs.10,000 as Prize	2012

Sr. no.	Name of the Student	Details of Activity/achievement	Year
1.	Anand Chourasiya & Jagriti Jain	Poster Presentation Eco 360 Organized by Deptt. of Biotechnology First Prize	2015
2.	Jenwin Baby	Republic day stamp design Conducted by Indian Posts & Telegraph department-Third Prize	2015
3.	Pragya Singh	Yuva Ratna Birla White' 14- Second Prize	2015
4.	Harshita Sharma	Vidyut' 15 NIT Trichy-First Prize	2015
5.	Ankita Singh& Shivam Sagar Gupta	Spotlight' 15 IIT Roorkee-Second Prize	2015
6.	Jagriti Jain and Anand Chaurasiya	Junk Morphia- JuryRecommendation	2015
7.	Ankita Singh	Poster Designing' 15 IIT Roorkee,(Womwn Harassment)-First Prize	2015
8.	Shubham Nema	IIT Roorkee' 15 -July,Recommendation	2015
9.	Satyam Shukla and Ashish Choudhary	Spotlight'15 IIT Roorkee-Third Prize	2015
10.	Satyam Shukla	1.Cadsmith'15 IIT Roorkee-First Prize	2015
		2. Zakyanta, 15-Special Recognition	
		3.Bambootech,15- Shortlisted Entry	
		4.Spotlight' 15 IIT Roorkee	
11.	Ashish Chaudhary	Paper Presentation: TECH-ENDOWMENT SITM,Guna.March'15 on Topic Transport- First Prize	2015
12.	Ashish Chaudhary	Logo Design for NATCON'15(IIA) to be held in Kolkata,W.B.-First Prize	2015
13.	Kapil Patidar	<ol style="list-style-type: none"> <li>1. Urban Innovation challenge- Jury Recommendation</li> <li>2. Ethose NASA Scholarship Hyderabad- Second Prize</li> <li>3. Bangalore building documentation-First Prize</li> <li>4. NDTV DAA Awards- Special Recognition</li> <li>5. Ethose NASA Scholarship Tamil Nadu- July Recommendation</li> </ol>	2015
14.	Raghav	Zonal Nasa <ol style="list-style-type: none"> <li>1. 2<sup>nd</sup> Runner-up in Main Design</li> <li>2. Special Mention in Photography</li> <li>3. Special Mention in Graffiti</li> </ol>	2014
15.	Shelly Vaish,Nityam Chourasiya,Deepak Patel	Transparence 2014(Design Problem-Metro Station Complex)	2014
16.	Joseph Victor and Kajal	Junk Morphia( Design Mafia)	2014

	Goyal Rachit Pamnani and Thoudam Sudha Jagrti Jain and Anand Chourasiya	2014(Design Problem- Shelter)-Jury Recommendation	
17.	Tapas Upadhyay	COA Best Architectural Thesis Award 2014(topic-Hybrid Solid Waste Management) (Special Mention)- First Prize	2014
18.	Ashish Choudhary	VNIT NAGPUR 2014 (Design Problem- Sabji Mandi At Nagpur)- First Prize	2014
19.	Pranay Gururn	<ul style="list-style-type: none"> <li>• Participation in State Level football</li> <li>• Shortput Gwalior nodal Gold</li> </ul>	2014
	Phalit Patel	<ul style="list-style-type: none"> <li>• 100 meter Gwalior nodal Gold</li> <li>• Participation in State Level Football</li> <li>• Shortput Gwalior nodal Gold</li> <li>• 100 meter Gwalior nodal Gold</li> <li>• 100 meter Gwalior nodal Gold</li> <li>• Short-put Silver Medal in State Level</li> </ul>	
20.	Shivam Sagar Gupta	Singing- 1 <sup>st</sup> position in college level Singing- 3 <sup>rd</sup> Position in College Level	2014

### 5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?

The institute has a clearly set and defined mechanism of obtaining the feedback from the students and stake holders to improve the performance and quality of the institutional provisions. Following feedbacks are taken so as to assess attainment of Programme Objectives and Programme Education Objectives;

- Semester end feedback from the students
- Exit feedback from graduating students
- Alumni feedback
- Employers feedback
- Parents feedback
- Faculty feedback

The feedback is analyzed and efforts are taken by the management to implement viable recommendations for improving the quality of the infrastructure and other facilities

### 5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the



**publications/ materials brought out by the students during the previous four academic sessions.**

Institute provides financial assistance to students to publish materials like catalogues, wall magazines, college magazine, and other material. Institute also publishes newsletter and upload on the institute website regularly. Institute encourages various extracurricular activities and motivates students to publish various magazine materials.

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

Each class has two ambassadors one male and one female. The ambassadors represents the class. They are selected on the basis of merit.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

The institute has various academic and administrative bodies having student representatives on them. Such bodies are:

- Class Representatives/Ambassadors
- Anti Ragging Committee
- Literacy Club
- ISTE Student Chapter
- CSI Student Chapter
- IChE Student Chapter
- IET chapter

**5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.**

The institution networks and associates with the alumni by involving them in academic activities such as lecture delivery, as a member of BOS. Their expertise is used in upgrading the knowledge and their suggestion are implemented in designing the syllabus. Silver jubilee meets are organized annually in December each year. It provides an opportunity for interaction between alumni and institute, paves way for participation of alumni in development of institute. Alumni scholarship is awarded to meritorious students. At departmental level, alumni are associated in various activities as follows-

1. Alumni are opted as members, board of studies. Their valuable suggestions are given due consideration while finalizing scheme and syllabi
2. Invited as keynote speaker/expert lecture in workshop/seminar for the benefit of the students.
3. Association in the organization of educational tours of students.



## CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 Institutional Vision and Leadership

**6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

**Vision:** To create world-class quality Engineers and Technocrats capable of providing leadership in all spheres of life and society.

**Mission:**

- To provide quality education in technical and allied disciplines.
- To organize and arrange innovative courses in Engineering and Technology.
- To arrange vocational courses in the upcoming fields and innovative subjects to meet global advancement.
- To promote research in the fields of Technology and Science

This commitment is translated into practice through:

- Regularly updating syllabi and curriculum as per the current need.
- Updating the skill of faculty and staff
- Carrying out the quality research in the frontier of engineering and technology.
- Continuous renewal of infrastructure and facilities.
- Creating congenial and conducive environment for stakeholders.

The alumni of the institute are deployed in various recognized institutions related to research and industry in India and abroad. The alumni are contributing at national level. Example: Mr. V.K. Saraswat is member of NITI Ayoug, Dr. R.K. Shegaonkar was the Director of Indian Institute of Technology, Delhi etc.

**6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

The faculty members are actively involved in decision-making process at individual level. They are members of College Academic Council, which is involved in decision making in academic matters.

Faculty members are in the committees like Anti-ragging Committee, Research and Development Cell, Consultancy Cell, Examinations Committee, Sports day Committee, Cultural festival Committee, and many other committees that are constituted for the smooth conduction of various events. All the new and revised policies to improve academic activities, methodology of conducting examinations are reviewed and discussed at appropriate level before implementation.

### 6.1.3 What is the involvement of the leadership in ensuring?

- the policy statements and action plans for fulfillment of the stated mission
- formulation of action plans for all operations and incorporation of the same into the institutional strategic plan
- Interaction with stakeholders
- Proper support for policy and planning through need analysis ,research inputs and consultations with the stakeholders
- Reinforcing the culture of excellence
- Champion organizational change

The authorities gather information about the various aspects of institutional functioning through a number of ways. The management encourages the participation of the staff in the process of decision-making in institutional functioning. Both teaching and non-teaching staff have their representatives at appropriate level for decision-making.

The college has constituted different committees comprising of teaching and non-teaching staff which play an important role in the planning and implementation of activities in different spheres of institutional functioning.

The personal interaction of the Director with the stakeholders, play an important role in implementation of policies. Apart from this, information available in student feedback forms and in self-appraisal forms of faculty members help the authorities to plan and provide proper support for the policies. The participatory role of the management encourages and sustains the involvement of the college staff, which is necessary for the efficient and effective running of the college.

The role of the Director is multi-dimensional. As the Head of the Institution, the Director is responsible for both the academic and administrative functioning of the College. He prepares the agenda for Governing Body meetings. He places before the Body, academic and administrative matters for the body's approval and is responsible for executing its decisions. The Director receives reports from the different College Committees, which offer advice to him in matters defined in the terms of reference of their functions.

### 6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The Director in coordination with HODs, Deans, section incharge, committee members and hostel wardens monitors all the institutional activities. The director consults with stakeholders for evaluating the policies and plans for effective implementation and improvement from time to time.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

The academic leadership is provided to the faculty by constituting different committees and units of the college:

- Academic council ;
- Board of Studies for different streams
- Research committee
- Library committee
- Examination committee;
- Controller Examinations
- Newsletter committee;
- Admission committee;

These committees include senior, young faculty members and students which help them to share and learn leadership qualities. The committee members actively perform their duties and submit the report to the director of the institute.

**6.1.6 How does the college groom leadership at various levels?**

The different committees are constituted in combination of senior faculty members and junior faculty members, which helps in grooming of leadership at various levels. The students of the institutes are involved in organizing various activities in various co-curricular and extracurricular activities, which provide the platform to groom leadership at various level. Class ambassadors /representatives are involved in running day-to-day affairs of the college and bring it to the notice to the class coordinators, HODs and other competent authorities. Opportunity for all the professors is given to serve as head of the department by rotation for a period of two years. Similar is for Deans and section incharges.

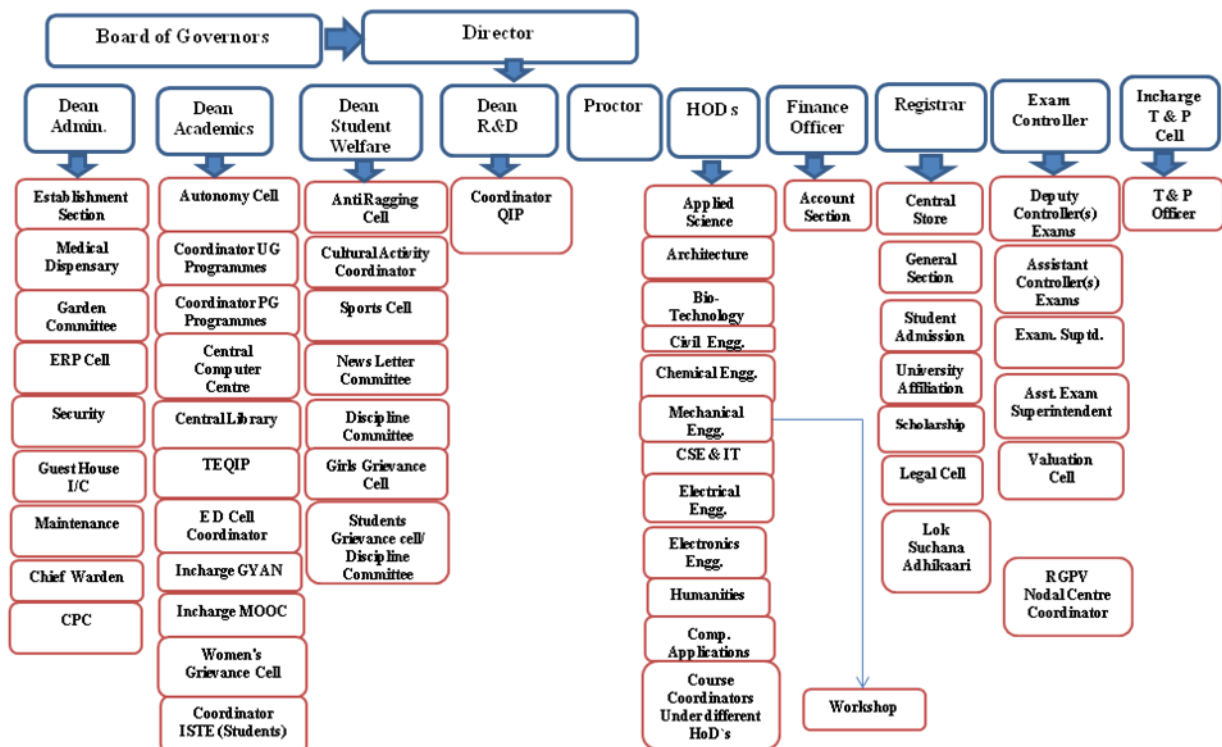
**6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

The College provides operational autonomy to the various departments and committees and the College administration works towards a decentralized functioning system as follows:

- Director is the final approving authority and has drawing and disbursing powers.
- The administration always seeks advice from the academic committee on various academic activities.
- The Heads of various Departments look after the day-to-day administration of the Departments and interact with the Director.
- The various committees in consultation with the Director make decisions regarding various co-curricular, extra-curricular and extension activities.
- Official activities are under the purview of the office superintendent.
- HODs give advice to the administration on departmental purchases & purchases of the College and have a monitoring autonomy.
- All the departments are academically autonomous.

### 6.1.8 Does the college promote a culture of participative management? If “yes”, indicate the levels of participative management

## Organizational Structure



## 6.2 Strategy Development and Deployment

### 6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Yes, the institution has a quality policy. The internal quality assurance cell, academic council, research committee, Library committee, and board of studies in coordination with the director develops the quality policy from time to time. Section incharge, wardens, deans, head of the departments of the institute are involved in quality deployment. The meetings are conducted with the class ambassadors of the each semester of different courses and the suggestions are incorporated in developing the policies as and when required. Directives issued by state government, All India Council for Technical Education, New Delhi and affiliating university are implemented from time to time. Board of governors also plays an important role in drafting quality policies.

**6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

Yes, the College has a perspective plan for academic and infrastructure development. It is prepared for next ten years. All the stakeholders – students, faculty members, non-teaching staff including local community member are involved in the preparation of the plan. It begins with informal consultation between

- Departmental Heads and faculty members,
- Non-teaching staff members.
- Students

**Academic expansion (year-wise)**

- Introduction/ augmentation of Programmes/courses.
- Recruitment of additional faculty.
- Additional requirement of supporting staff.

**Infrastructure development (year-wise)**

Construction of additional building with measurement and projected cost.

Proposed plan for next years are given in Annexure VII

**6.2.3 Describe the internal organizational structure and decision making processes.**

**Internal Organizational Structure:**

The Director is the administrative Head of the institution. Committees like Discipline committee; Anti-Ragging Committee, Committee against Sexual Harassment and Discipline Committee discuss and take decisions of administrative activities. The Heads of various Departments are responsible for the day-to-day administration of the Departments and report to the Director. Organizational structure is also given in 6.1.8

**Decision Making Process:**

All external major decisions, like annual budget allocation, teaching staff and non-teaching staff recruitment, physical infrastructure development, student support and welfare scheme are managed by the Board of Governors. The institution uses various data and information obtained from the feedback from students, HODs and faculty, committees and cells, the non-teaching staff in decision-making. The decisions are then circulated to all concerned stakeholders for deployment.

**6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following**

- **Teaching and Learning**
- **Research and Development**
- **Community engagement**

- **Human resource management**
- **Industry interaction**

The quality improvement strategies of the College in teaching & learning, research & development, community engagement, human resource management, industry interaction are described broadly as under:

Strategies to improve the quality of **Teaching & Learning** process:

- Taking introductory classes to bridge the knowledge gap of the enrolled students to enable them to cope with the Programme of their choice.
- Providing remedial coaching classes for the socially-backward and economically-weaker students to enable them to cope with the Programme of their choice.
- Following the academic calendar.
- Providing the learning facilities like smart classrooms, modern teaching aids like LCD projector, well-equipped laboratories with lab assistants, well-stocked library with reading room and internet connection to make learning effective.
- Balancing between sanctioned and filled recruitment of teachers.
- Upgradation of the main library with new text books and reference books, internet connection.
- Faculty members are given permission with study leave to enrich their knowledge through seminars, orientation programmes, refresher courses, etc.

Strategies to improve the quality in **Research & Development**:

Institute always promotes research activates in all the departments and Dean (R&D) monitors the research activities:

- All the departments are having state-of-art laboratories for cutting edge research.
- Number of research scholars are pursuing their Ph.D. degree.
- Number of faculty members is having research projects funded by different agencies.
- Departments are also having links with industries to do the cutting edge research.

Strategies to improve the quality in **community engagement**:

- The College has active NSS unit performing social service at different levels like literacy, blood donation, health and hygiene tree plantation, environment protection etc. The NCC wings participate in various state level and regional level parades and special camps in which basic military training is given to develop capacity among students to face emergencies and natural disasters. Science Forum has many annual programmes like participation in science drama competition at inter-college, district and state



levels, science fair etc. to eradicate superstitions and to generate awareness among the community.

- Students are also motivated to participate in various seminars and discussions to give them exposure to current societal problems and generate awareness regarding their roles and responsibilities in society.

Strategies to improve the quality **in human resource management:**

- Encouragement to faculty members to attend various faculty development programmes.
- Provision of pay scale to faculty members as per State Government norms and AICTE norms.
- Provision of Self-Appraisal Reporting system for faculty members at the time of promotion from one post to another post and one grade pay to another grade pay.
- Access to computers to all sections of administration.
- Encouragement to students to attend seminars/symposiums/workshops/invited lectures.

Strategies in **industry interaction:**

- Institute has SKF Asset Reliability Centre in Department of Mechanical Engineering which provides training on vibration analysis
- Department of computer science and engineering has IBM centre of excellence which works as a training and certificate provider.
- Institute is engaged in Infosys intercampus connected programmes.
- Department of Chemical Engineering has collaboration with Lupin Chemicals.
- Department of Civil Engineering is providing testing and consultancy services to different industries/organizations like Nagar Nigams, PHE, PWD, National Highway authorities, soil testing etc.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

The Director being the Head of the institution collects feedback from stack holders like faculty, staff and students and takes requirement about finance and infrastructure from head of the department and Deans and compiles the information to present before the board of governors for final approval and necessary guidance.

Adequate information to all the stakeholders is published in the College Website and Prospectus.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

The chairman, BOG members, secretary and director of the institute conducts the meeting of the HODs, faculty members and staffs at regular durations to encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

Please see Annexure VIII.

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If “yes”, what are the efforts made by the institution in obtaining autonomy?**

Yes, institute is an autonomous body and affiliated by RGPV. The university team members make visit from time to time for providing the autonomous status to the institute.

**6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?**

The grievances/complaints come from the students and teaching and non-teaching staff. The common and individual complaints from the teaching staff are discussed and solved in the meeting in a healthy manner. Faculty members are also free to express their individual complaints and problems directly to the Director privately. The complaints from the students individually or through the Discipline committee are directly brought freely to the notice of the Director. The complaints/grievances are attended promptly and resolved immediately. One complaint box is kept nearer to the Director’s chamber. The complaints from the other stakeholders are promptly attended by the Director. In some cases, the Director takes necessary action alone while in some other cases, decisions are taken jointly by the Director and concerned committee members.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

Please see Annexure IX

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If “yes”, what was the outcome and response of the institution to such an effort?**

Yes, the Institute has a set mechanism of obtaining student feedback on its institutional performance. The Director collects feedback on its institutional performance from passing out students via Training and Placement Cell. The obtained data is analyzed and used for the improvement of institutional performance.



### 6.3 Faculty Empowerment Strategies

#### 6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

Institute organizes faculty development programmes funded by AICTE, DST, ISTE, CSIR, TEQIP and other funding agencies regularly which enhance the knowledge of faculty and non teaching staff.

Institute also encourages and sponsors faculty members and non teaching staff to participate in various workshops and short term training programmes organized by other institutes.

#### 6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

- The staff is encouraged to attend seminars and workshops and keep in touch with latest theories and concepts in their subjects.
- The staff is permitted to attend faculty development programmes conducted at different institutions.
- The staff is encouraged to participate in Conferences and travel grant is provided for the same.
- The teaching staff is encouraged to publish research work in indexed journals.

#### 6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

The institute has a self-appraisal system to evaluate the performance of the faculty and ensure that information on multiple activities, like teaching, research and activates other than teaching etc. is appropriately captured and considered for better appraisal. The College also appraises the performance of its non-teaching staff at the time of promotion recommended by the Director and increments are provided according to the recommendation.

Format of self appraisal form for faculty is given in Annexure X.

#### 6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

- Performance appraisal outcome is considered during promotion and new grade pay as per the norms.
- Outcomes and decisions are communicated to the appropriate stakeholders through the Director.
- In case of any adverse remark by the competent authority it is communicated to the concerned faculty/staff.

**6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

The College has several welfare schemes, listed below, for its teaching and nonteaching staff. About 80% staff/faculty has availed the benefit of such schemes in the last four years (2011-2015):

S. No	Employees Welfare Schemes and Facilities	Teaching Staff	Non Teaching Staff
1.	Health Care	Yes	Yes
2.	Bank Facility (In Campus)	Yes	Yes
3.	Medical Allowance	Yes	Yes
4.	Conveyance Allowance	Yes	Yes
5.	House Rent Allowance	Yes	Yes
6.	Uniform and Washing Allowance	No	Yes (For Class IV)
7.	Harassment Policy	Yes	Yes
8.	Maternity and Paternity Leave	Yes	Yes
9.	Casual Leave	Yes	Yes
10.	Optional Leave	Yes	Yes
11.	Earned Leave	Yes	Yes
12.	Medical Leave	Yes	Yes
13.	Duty Leave	Yes	Yes
14.	Skill Development Policies	Yes	Yes
15.	Sponsor Programmes	Yes	Yes
16.	Promotions/Time Scale Promotions	Yes	Yes
17.	Group Insurance	Yes	Yes
18.	DCRG Payment	Yes	Yes
19.	Leave Encashment Payment	Yes	Yes
20.	EPF Payment	Yes	Yes
21.	Ex-Gratia Payment	Yes	Yes

- **Duty leave -**

Duty leave is given, if applicable. 100 percent of teachers has availed duty leave for attending orientation programmes/refresher courses/seminars/conferences/training Programmes/workshops/acting as resource person etc. Thirty percent of non-teaching staff availed duty leave for attending staff development programmes.

- **Medical Leave -**

- Medical leaves are given to all the staff members. All teaching staff and all non-teaching staff has availed medical leave at least once within the last four years.
- Maternity leave is provided to its female staff. 10% staff has availed maternity leave.
- 15 days paternity leave is provided to the male staff. 20% staff has been availed such leave.

- **Insurance** - An insurance policy named Group Insurance is available to all the staff members of the college. The monthly premiums are automatically deducted from the salary as per Groups - A, B, C, D.
- **GPF** - Provision of provident fund is available for all the staff members.
- **Gratuity** - Gratuity benefit is provided after retirement.

### **6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

The Institution has the following provisions to attract and retain eminent and talented faculties,

- Faculty members have the free access to Institutional facilities for carrying out research work.
- The Institution meets all expenditures incurred by the faculty members in presenting papers at National and International seminars, registration fees, TA, DA and other expenses including on-duty leave.
- The institute funds seed money to short-term and long-term teacher-led student projects.
- Institutional support is provided to faculty members who undertake funded projects.
- The faculty is deputed to undergo training in Research laboratories.
  - Professors from reputed foreign universities are invited to give guest lectures to enhance the research capabilities of faculty members.
  - The faculty members involved in consultancy work are motivated by appreciation in term of finance.

## **6.4 Financial Management and Resource Mobilization**

### **6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

Before the start of next financial year, the director asks from each department about their budgetary requirements. Head of the department ask from all the faculty in charge about the funds requirements in their laboratories and then heads send the proposal to the Director. The Director compiles all the information and presents to the finance committee of the board of governors and the recommendations of the finance committee are placed before the Board of Governors. Considering the recommendations of the finance committee, Board of governors approves the budget for each financial year.

Utilization of annual budget report is submitted to the director by each department. Principal investigators of research projects submit the report to the funding agency time to time.

### **6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

Institute has the policy of pre audit. There are two type auditors in the institute:

- State government has appointed auditor do the auditing before making any payment of the funds received from state government

- Board of Governors appoints a Chartered Accountant for the auditing of all the other funds.

For major audit Refer Annexure XI

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.**

Major source of receipts are from the state government, fee and financial assistance from the central government. There is no deficit.

Please refer Annexure XII for audited balance sheet of last four years.

**6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

Additional fund is procured from world bank through TEQIP and by various research funding agency such as AICTE, UGC, DST, CSIR, AAYUSH, M.P. Council of Science and Technology etc,

**6.5 Internal Quality Assurance System (IQAS)**

**6.5.1 Internal Quality Assurance Cell (IQAC)**

**a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If "yes", what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes, institute has recently constituted an internal quality assurance cell.

**b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?**

Following are the decisions of the IQAC which have been approved for implementation:

- To conduct academic activities in thrust areas
- To conduct workshops for updating the syllabus as per the demand of time
- To monitor the teaching quality of the faculty by taking periodic feedback from the students

**c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes, IQAC has external members. They are contributing in upliftment of the institute time to time.

**d. How do students and alumni contribute to the effective functioning of the IQAC?**

Meritorious students of departments are the members of IQAC and being called for meeting and inputs are taken for reforms to be made academic and administrative upliftment.

**e. How does the IQAC communicate and engage staff from different constituents of the institution?**

Yes, the constitution of IQAC has members from different constituents of the institutions as follows:

## Madhav Institute of Technology and Science, Gwalior

(A Govt. Aided UGC Autonomous Institute under RGPV, Bhopal)

Date: 05/08/2017

### Constitution of the Internal Quality Assurance Cell (IQAC)

The IQAC was constituted in the institute according to the 12<sup>th</sup> Plan guidelines of the University Grants Commission (UGC) on 27/12/2016.

Additional members are being inducted according to the National Assessment and Accreditation Council (NAAC) guidelines

#### Chairperson: Head of the Institution

S. no	Name	Designation
1	Dr. R.K. Pandit	Director

#### External Experts

S. no	Name	Designation
Dr. S.N. Singh	Vice Chancellor	MMM University of Technology Gorakhpur
Dr. B.S. Pabla	Professor,	NITTTR, Chandigarh

#### From the Management

1	Shri Prashant Mehta, IAS	Member, Board of Governors
2	Er. Ramesh Agrawal	Secretary, Scindia Engineering College Society & Member BoG

#### Teachers

1	Dr. Manjaree Pandit	Dean Academics	Electrical Engineering
2	Dr. Laxmi Srivastava	Professor & Head	Electrical Engineering
3	Dr. P.K.Singhal	Professor & Head	Electronics Engineering
4	Dr. R.K. Gupta	Prof. & Head	Computer Science & Engineering & IT
5	Dr. R.K. Kansal	Professor	Civil Engineering Department

#### Administrative officers

S. no	Name	Designation
1	Er. R.K. Goyal	Assistant Engineer
2	Er. Shailendra Singh Bhadauria	Administrative Officer
3	Shri D. Gorakhpuri	Finance cum Accounts Officer
4	Shri Sanjay Bhargav	Hostel Manager
5	Dr. Deep Sharma	Project Leader
6	Er. Vikram Rajput	Training & Placement Officer
7	Mrs Pallavi Shrivastav	Assistant Registrar

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**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If “yes”, give details on its operationalisation.**

Yes, the institution have an integrated framework for Quality assurance of the academic and administrative activities through systematic recordkeeping and frequent training sessions of the administrative staff to make aware them about the latest trends in technology.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If “yes”, give details enumerating its impact.**

Yes, the institution provide training to its staff for effective implementation of the Quality assurance procedures by encouraging to attend workshops, training, conferences and seminars on a regular basis at various national institutes.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If “yes”, how are the outcomes used to improve the institutional activities?**

Yes, the institute undertake internal academic audit twice in a semester. The internal committee of the academic audit analyse the quality departmental academic activities. The report is communicated to each department for necessary improvements.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

The internal quality assurance mechanisms are aligned with the requirements of the relevant external quality assurance agencies through TEQIP by world bank fund.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

- Dean(Academic) prepares the academic calendar before the start of the semester classes.
- All the faculty members prepare the lesson plan.
- Students manual for all the classes are prepared. The student manual contains, academic calendar, lesson plans, syllabi, timetable, tutorial sheets, question paper of previous end semester examinations.
- Class coordinators for each class are appointed.
- Day to day monitoring of students attendance is done through ERP software.
- Letters are send to the parents of the students whose attendance is less than the norm.



- Two mid semester examinations are conducted.
- Class Review Committee meetings are held regularly for all classes to review effectiveness of teaching learning process.
- Students feedback about the teaching methodology are collected and analysed during the semester. Corrective actions are taken accordingly.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

Yes, the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders.

- The college website is regularly updated on all the notifications and development/activities pertaining to the administrative and academic matters for the different internal and external stakeholders. Besides the college prospectus, students' and teachers' notice boards are the other means of staying connected with our stakeholders.
- At the commencement of the new academic session, an orientation program for the freshers is organized by the college wherein the Director, Head of the Departments and Deans introduces the students to the rules, regulations, and facilities at the college, and the quality assurance policy.

## CRITERIA VII: INNOVATIONS AND BEST PRACTICES

### Environment Consciousness

#### 7.1.1 Does the Institute conduct a Green Audit of the campus and facilities?

There has been no formal procedure developed for Green Auditing as of now. The Institute has a lush green and environment friendly campus. The staff and students have planted many tree saplings from time to time during various occasions. The authority and management are taking all necessary steps to avoid the use of plastic bags inside the college campus and are promoting the use of 3'R's - **Reduce, Recycle & Reuse**. Many community based environment awareness programmes have been conducted by the NSS unit of the college. The institute also maintains a checklist of the following:

- Periodic assessment and disposal of unwanted stationery, waste materials and discarded equipments.
- Regular maintenance of water sump and sewer lines.
- NSS activities pertaining to maintaining neat and clean environment and plantation activity in the Institute campus.
- Lawn maintenance and tendering of plants by skilled gardeners.

Besides this, the pre-requisite to have a Green audit is to have all the construction work completed. However, the Institute is planning to pioneer a comprehensive Green Audit procedure in compliance to the use of water, energy and green cover once the construction work gets completed.

#### 7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?

##### \*Energy Conservation

- The institute maintains a checklist of energy audit to monitor the energy consumption and its optimum utilization.
- Awareness has been created among the staff and the students through various energy conservation Programmes.
- All the electrical utilities are switched off whenever not required.
- Incandescent bulbs are replaced with energy saving compact fluorescent lamps and LED bulbs.
- The classrooms are constructed to have maximum air circulation and natural lighting.
- All the old computer monitors are replaced with LCD/LED monitors.



- Window ACs are phased out with more efficient split ACs and temperature is set at 25<sup>0</sup>C.

\* **Use of renewable energy**

There has been a proposal to harness solar energy in the form of solar water heaters for providing hot water in the institute guest house and hostels. The prospects of setting up of a biogas plant that uses the domestic waste from canteens, hostels and guesthouse are also being investigated.

\* **Water harvesting**

The institute is giving utmost importance to rain water harvesting. The college is planning to make provisions of rain water harvesting system in all the buildings which would help in minimization of water shortage and maximization of available water usage. This would also help in improving the quality of ground water in the college campus.

\* **Check dam construction**

A check dam like structure has been constructed in open rain water channel to prevent soil erosion in rainy seasons and also to divert the water stream for irrigation purposes in the plantation.

\* **Efforts for Carbon neutrality**

- The college location is quite far from any industrial area.
- LPG cylinders are only used in guesthouse, canteen, hostels and other places for cooking purposes.
- There is no burning activity anywhere near the campus.
- Specific parking places are allocated for staff and students.
- Gardens and tree plantations are developed inside the institute premises.
- Minimal use of Generator sets within the campus.
- Printing is done on both sides of paper and all documents are thoroughly edited before printing.
- Plastic cups are strongly discouraged in the college campus.
- Institute is focusing on Eco-concerns, 3'R's - Reduce, Reuse and Recycle.

\* **Plantation**

There are a number of trees at various places in the institute campus. Tree plantation Programmes are organized on a regular basis by the NSS / NCC unit of the college. There are well manicured lush green lawns and gardens inside the campus. There is a large well maintained teak plantation in the hostel zone. Eucalyptus, ashok and other shady trees are planted on either side of the avenues. The layout of the campus has sufficient scope for landscaping and greening of the campus.

\* **Hazardous waste management**

There is minimal generation of hazardous waste in the campus. The used chemicals and exhausted batteries are disposed through external agencies.

Awareness Programmes have been conducted on waste management. The waste chemicals in labs are diluted with water and then disposed properly. The use of plastic bags is strongly discouraged in the college campus. Dustbins are provided at suitable places for collection of waste, if any.

\* **e-waste management**

Electronic waste, such as discarded computers, office electronic equipments, gadgets and other peripherals are disposed off as per their conditions or delivered to companies engaged in recycling of e-waste.

## 7.2 Innovations

### 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

The institute has taken many innovative steps in the last four years for its smooth functioning. Some of them are listed below:

\* **Innovations in academic system**

- Student manual with lecture plan, assignment questions, old question papers and references are distributed to the students at the beginning of the semester.
- Faculties are appointed as class coordinators for monitoring and arrangement of classes, to keep track of students' performance and to address issues pertaining to the respective classes.
- Student feedback is taken periodically on individual courses.
- Performance review of faculty based on the student feedback is done.
- The Entrepreneurship Development Cell of the institute organize faculty development Programme, skill development training through science & technology on different areas etc to equip the faculty with the latest trends in teaching and research.
- The institute has taken adequate steps to wedge the gap between academia and industry. Many departments have signed MOUs with industries in this regard.
- Workshops, training, conferences and seminars are organized on a regular basis.
- Teaching assistantships are given to post graduate students in order to motivate them for quality research.
- Faculty mentors are assigned to every 15 students for keeping a close check on their performance.
- Remedial classes are arranged to make up for weak and slow learners.
- Experienced people from reputed institutions and industry experts are invited on a regular basis for delivering guest lectures.

- Parents are kept well informed about the performance of the students. The attendance of the students is closely monitored.
- Classroom lectures are supplemented with appropriate online lessons from reputed course websites whenever required
- Special communication and personality development classes are being conducted by the Training and Placement cell for students.
- Several new courses such as M.Tech. Geo Informatics, M.Tech. Environmental Engineering, B.E. Automobile Engineering, B.E. Electronics & Telecommunication Engineering and M.Tech. Cyber Security have been introduced in the last four years.

**\* Innovations in Administration & Infrastructure**

- The admission procedure has been centralized where the students and parents are assisted with all joining formalities at one place.
- Highly qualified and experienced faculties are recruited against the vacancies created in various departments.
- The functioning of various sections such as establishment, examinations, accounts, students' office etc has been decentralized.
- Classrooms are equipped with provision of conducting smart classes.
- The library facilities are fully computerized and there is good enhancement of resource material on various topics.
- Setting up of regional nodal centre of RGPV has made the process of submission of exam fee and getting professional degree certificate quite easy.
- The college, being an autonomous institute, has decided to show the answer sheets of the end semester examination to the students to have transparency in the valuation system.
- New dormitories for boys and girls are being constructed in the campus.
- Anti ragging duty is assigned to the faculties to have a peaceful and harmonious environment in the college campus.
- All the labs and computing facilities are equipped according to the needs of students and latest trends in different engineering fields.
- The number of students getting placement has increased greatly over the last four years.
- The campus is enabled with 24 hours wi-fi facility.

**\* Innovations involving students' participation**

The students' representation is ensured in bodies having student support activity such as class committee, hostel committee, fine arts and sports committee.

- The college has many professional bodies with student members like IEEE student chapter, CSI student chapter, ISTE student chapter, IET etc. in

addition to these, 60 clubs have been formulated to perform various activities.

- The students are given opportunities to interact with the industries and do in-plant training as a part of their curriculum.

**\* Innovations in Research and Development**

- The faculties are encouraged to publish their research work in different journals.
- Inter-departmental research projects are encouraged.
- R&D facility has been set up in the mechanical engineering department.
- Consultancy projects are undertaken by various departments of the institute.

**\* Innovative strategies Governance and Leadership**

Alumni Association has been formed to maintain links between the institute and the old students.

### **7.3 Best Practices**

7.3.1 Elaborate on any two best practices which have contributed to the achievement of the institutional objectives and / or contributed to the quality improvement of the core activities of the college.

The two best practices which have contributed to the achievement of the institutional objectives and / or contributed to the quality improvement of the core activities of the college are as under:

#### **7.3.1.1 The Mentor – Mentee System**

##### **1. Title of the practice**

The Mentor – Mentee System

##### **2. Goal**

The purpose of this practice is to bridge the gap between the students and the faculty, to provide guidance to students on all academic matters besides personal counseling and to enhance their capabilities. The main focus of mentorship is to develop the all round personality and to make them more professionally competent, mature and responsible citizens by the time they leave the thresholds of the institute. Each faculty functions as a counselor cum mentor for a group of students in a particular semester. The faculty assists the students to cope with the curriculum, understand the institute's expectations of its students, participate in co-curricular and extra-curricular activities, solve personal issues, as well as groom their skills and aid in all

round personality development. In addition to the mentor, the students may seek counsel from other faculty members.

### 3. **The Context**

The main issue that had to be addressed was the lack of healthy interaction between the faculty and the students. This happened partly due to the lack of time to address the issues of students from the faculty's side and partly due to the attitude of the students towards the teachers. On one hand, students did not find the concerned faculty approachable mainly due to his busy schedule, and on the other hand, the students themselves were reluctant to approach and interact with the faculties. Also, the students were more interested in getting marks rather than understanding the practical application and fundamental principles underlying a concept. So it took a while to inculcate a good teacher-student relation.

### 4. **Practice**

The mentor - mentee system helps the faculty in recording the academic progress of each and every student. Every faculty is in charge of 15 - 20 students and act as a mentor for those students, so that they can approach their respective faculty in case of any academic / personal help. This personal mentoring system helps the faculty in identifying the academically weak students. Those students are called for personal counseling and the mentor tries to understand the nature of the problem faced by these students.

On analysis, the poor performance of the students has been attributed to reasons of two types. One may be due to their academic background and the other may be due to their economic and social background.

While analyzing the academic reasons it has been found that Students who have completed their schooling in Hindi medium find it difficult in understanding the technical concepts as they are taught in English. This problem when left unaddressed leads to lack of interest in the subject, which reflects on their end semester results and in worst cases may even lead to drop outs. Such students are given special emphasis and are encouraged for group studies. Special classes are arranged during morning hours to enhance their capabilities to understand the English medium deliberations. This concept helps in not only creating a better rapport among the students but also helps them in understanding the concepts well because they may find it easy in asking the help of their friends in studies.

Incidentally the students predominantly are from weaker and disadvantaged section of the society. The financial constraints faced by the students also have its effect on their academic performance. When the mentors come to know of such difficulties they suggest the students about the external financial options that are available like, bank loans, Government

scholarships etc., In a few cases the Management also sponsors the education of such students through scholarships and free-ships.

The performance of the students in the class is reviewed every 15 days in the department and as stated, the faculty members care for the academically weak students by way of personal counseling and mentoring. When identified at the beginning of the course and in some cases even before that (with the help of analysis of their performance in higher secondary examinations and class room interaction during the bridge courses), it becomes easier to bring them to the main stream and instill a sense of confidence in them so that they can perform well in their subsequent semester examinations.

## 5. Evidence of Success

It has been noted that the academic performance of students has always been on the rise and the result analysis done every semester is a proof of it. The result analysis not only give the data about the performance of the students during the semester exams, but also on analysis the faculty will be able to judge whether a particular student is good in analytical or theory subjects, what kind of remedial measure is needed to solve his problem etc.

Every semester the faculty is encouraged to achieve 100% results in their respective subjects. The management has clearly understood that the process of achieving good academic results is not only in the hands of the students and faculty, but also the backing of the management plays a major role in achieving the same. The management provides all possible help in this regard.

The review of the results has shown that the students have performed better as the course progresses and there has been an incremental academic growth in their performance.

## 6. Problems Encountered and Resources Required

As every reform has a turbulent phase, so also this system, when implemented, had its own share of problems like

- Hesitation on the part of the rural students to mingle with their city counterparts.
- Non co-operation from the students in accepting the study hours at the hostel.
- Lack of self-belief and motivation among such students.
- Faculties finding it difficult in staying back after college working hours.
- Transportation problems for the faculty and day scholar students.
- Counseling the students and making them understand the importance of overcoming the demon inside them that prevented them from accepting the additional study hours at the hostel.
- Personality development sessions for the rural students.

## 7. Notes (optional)

The mentor - mentee system for the academic growth of the students is a flagship model of MITS. It has to be understood that when this system was introduced there were a few problems faced by the management as mentioned above. However these problems were overcome by the strong belief of the management on its systems and practice, guidance of the Director and other senior faculties, support of the faculty and students. When the above stakeholders are convinced about the workability and implementability of a system then it can be assured that the results will surely be there for everyone to see.

## 8. Contact Details

Name of the Director : **Dr. R. K. Pandit**

Name of the Institution : **Madhav Institute of Technology & Science**

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Pin Code : **474005**

Accredited Status : **Applying for the first time (various depts. are already accredited by NBA)**

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### **7.3.1.2 Execution of Training Programmes under TEQIP Phase-II and imparting industrial exposure to students**

#### **1. Title of The Practice**

Execution of Short Term Training Programmes

#### **2. Goal**

The institution has a strong vision of promoting R & D activities in diverse areas aiming to practical oriented studies in Science, Engineering and Technology. MITS aims at facilitating the Research activities with cross cutting functions of Institute-Industry partnerships, Knowledge and Technology, Transfer, analysis of concepts and Programme integration. This should also help in gathering, disseminating and forecasting the information about the availability of various research grants from funding agencies such as DST, UGC, AICTE, CSIR etc., culminating in providing help and guidance for the preparation of the research proposals. The practice should also initiate teacher - led student research projects in innovative fields of science and technology for involving the students in research activities. This practice also imparts practical exposure to students in upcoming technologies by conducting workshops, guest lectures and seminars by internal and external academicians/industrialists and through industrial visits.

#### **3. The Context**

The main issue that had to be addressed was the lack of awareness among the young faculty about the research opportunities that were available in their respective fields. The faculty were more focused on making the students achieve good results rather than training their young minds towards looking for something new; innovate some product or process; question the existing system and thinking outside the box. A need was felt to motivate and create awareness among the students and faculties about various areas of research and also to impart practical knowledge to the students.

#### **4. Practice**

The students are expected to be strong in academics and have good industrial exposure. They are encouraged to update their knowledge with latest developments in their respective disciplines and allied subjects. In addition to good academic record, the students need to develop leadership qualities and good communication skills and soft skills. In this aspect, eminent personalities from various reputed institutes and industries like Mr. D.P. Agrawal etc. are invited to impart the practical exposure to the students through workshops, seminars, guest lectures, etc. Also, the students are motivated to share their ideas with the outside world by presenting their research work in National /International conferences. To gain industrial knowledge, the students are encouraged to visit the industries. Various Short Term Training Programmes (STTPs) on relevant research fields are



organized under TEQIP Phase II by the institute from time to time. As a result, the faculties and the students are benefited and oriented to carry out novel research activities.

## 5. Evidence of Success

The research activities carried out in various departments of the institute have received thrust through these STTPs. The following results have been achieved:-

- Several consultancy works have been taken up by the faculty of various departments.
- Institute has applied for research grants from funding organizations such as AICTE, DST etc.
- Faculties have published several research papers in Journals and Conferences.
- Many staff members have enrolled for their doctoral Programmes and are involved in active research.
- Additional equipment has been procured for R&D.
- Industrial exposure has led to increase in campus placements.
- A number of research journals are subscribed by the central library.
- Many faculties have registered for Ph. D.
- The student projects for UG and PG courses are conducted in the college under the guidance of the faculty.
- Quality Improvement Program (QIP) centre has been set up in the institute.

These achievements clearly indicate that the efforts taken by the institution to promote R&D activities has given the desired results. This has led to more faculties being motivated to take up research oriented projects that would not only help them in acquiring higher qualifications but also will benefit the society at large.

## 6. Problems Encountered and Resources Required

The main issue that cropped up while conducting the STTPs was in identifying the avenues of research and inviting experts from academia and industries. Another issue was in ensuring participation of students, researchers and faculties from other institutions and organizations.

So the first task was to make them aware of the technological innovations that were going on in various innovative and developing areas in their respective fields. Once the faculty knew about these it kindled the eagerness in them to know more about the technological advancements and to pass on this new information to their students. This subsequently made their lectures more interesting and the students were also willing to learn something new that was not available in their text books.

Secondly, association with the alumni and academia - industry tie ups were essential to execute this practice in reality. Even, development of attractive and meaningful brochures and publicity of the event was indispensable to enhance the participation from other institutes and organizations.

### Notes (optional)

Today's competitive world has made most of the teachers to train the students in the given domain rather than train them in searching for knowledge. They are no more asking questions or seeking answers but they are busy learning the answers. As a premier institution in the state of Madhya Pradesh, MITS management realized that it had the responsibility of being the guiding light to other institutions. In this context the execution of STTPs was floated in a planned and phased manner. As it happens with every great endeavor, the management came across quite a number of hurdles. However the management firmly believed in the policy of encouraging research activities and to churn out not just routine engineers but technocrats who would take the country in the path of success. This persistence and self-belief combined with the cooperation of its faculty under the able guidance of senior researchers has made MITS one of the most sought after institutions not only by the students but also by young aspiring teachers who are willing to travel that extra mile to achieve their dreams.

### 7. Contact Details

Name of the Director	: <b>Dr. R. K. Pandit</b>
Name of the Institution	: <b>Madhav Institute of Technology &amp; Science</b>
City	: <b>Gwalior</b>
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There are several other practices followed by the institute which are given below:

- \* The institute library issues 3 books, now increased to 5 books to the general category and 8 books to the socially deprived students so as to help them in their curriculum.

- \* Technical fest is organized in every alternate year to provide a platform for the students to promote their innovative ideas.
- \* The institute has implemented the system of showing the end semester examination answer sheets to the students from the academic year 2015-16 in order to impart transparency in the valuation system..
- \* The mid - semester answer copies are shown to the students so that they can learn from their shortcomings and fair better in the final exams.
- \* Continuous evaluation and assessment of the employees and the students is being done for identifying the avenues for scope of improvement.
- \* Special classes and training Programmes are conducted at regular intervals for value addition in professional skills such as a training Program was conducted by the civil Engg. Dept on Electronic Total Station.
- \* The institute management provides suitable funding to the UG & PG students and faculties to undertake training in laboratories and institutes of national repute like NITTR Bhopal, NITTR Chandigarh, NPC New Delhi, IIM Indore, IIM Ahmedabad, IIT Bombay, IIT Kharagpur, etc.
- \* Remote centre of IIT Bombay for 10 KTK has been established which provides information of latest developments in relevant areas.
- \* Orientation Program is conducted every year for the 1<sup>st</sup> year students which is participated jointly by the candidate and his/her parents.

## 4. Evaluative Report of the Departments

### 1. Name of the Department & its year of establishment

1.	Biotechnology,	2002
2.	Chemical Engineering	1996
3.	Computer Applications	1986
4.	Electronics Engineering	<b>1982</b>
5.	Civil Engineering	1957
6.	Computer Science & Engineering and Information Technology	
7.	<b>Architecture</b>	<b>1984</b>
8.	<b>Humanities</b>	1957
9.	<b>Applied Sciences</b>	1957
10.	Electrical Engineering	1957
11.	<b>Mechanical Engineering</b>	1957

### 2. Names of Programs / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

S. No.	Courses Offered	Description
1	B.E. Biotechnology (UG)	Started in 2002, Intake 30
2	M.Tech Biotechnology (PG)	Started in 2004, Intake 18
Chemical		
	B.E. in Chemical Engineering (UG)	Started in 1996 with intake 30.  Increase in take from 30 to 60 in the year 2013.
	M.Tech in Chemical Engineering (PG)	Started in 2013 with intake of 18
MCA		
	MCA, PHD	MCA Department
Electronics		
		Started with 15 seats in 1982

	Under Graduate B.E. Electronics	Intake increased to 30 in 1987  Intake increased to 60 in 2001  Intake increased to 120 in 2013
		Accredited by NBA-AICTE in 2003 for 03 years  Accredited by NBA-AICTE in 2013 for 02 years
	Under Graduate B.E. Electronics and Telecommunication	Started with Intake of 60 in 2015
	PG M.E. in Communication Control and Networking	Started in 1995 with 18 intake increased to 23 in the year 2005 and 25 in 2008
		Accredited by NBA-AICTE in 2003 for 03 years
	M.Tech. in Electronics and Communication (Microwave Engineering)	Started in 2002 with 18 intake
Civil		
	<b><u>Under Graduate Courses</u></b>	
	Bachelor of Engineering (B.E.) in Civil Engineering – 4 years duration – 120 intake	

	at present in the First Year.		
	<b><u>Post Graduate Courses</u></b>		
	Master of Engineering (M.E.) in Construction Technology & Management – 2 years duration – 25 intake in the First Year.		
	Master of Technology (M.Tech) in Environmental Engineering – 2 years duration – 18 intake in the First Year.		
	Master of Engineering (M.E.) in Structural Engineering – 2 years duration – 7 intake in the First Year.		
	Master of Engineering (M.E.) Part Time in Construction Technology & Management – 3 years duration – 5 intake.		
	<b><u>Ph.D. Courses</u></b>		
	The department is recognised as QIP centre for Ph.D.		
CSE/IT			
UNDER GRADUATE PROGRAMMES			
1994	B.E.- COMPUTER SCIENCE & ENGINEERING	4 YEARS	120
2000	B.E.- INFORMATION TECHNOLOGY	4 YEARS	60
POST GRADUATE PROGRAMMES			
2011	M.TECH. - COMPUTER SCIENCE & ENGINEERING	2 YEARS	18
2012	M.TECH. - INFORMATION TECHNOLOGY	2 YEARS	18
2013	M.TECH. – CYBER SECURITY	2 YEARS	18
Ph.D Programme			
ARCHITECTURE			
	1. UG		

	<b>2. Masters in Urban Panning .</b>		
HUMANITES – NA			
applied-NA			
Electrical			
<b>Programme of Study</b>	<b>Description</b>		
BE in <b>Electrical Engineering</b>	Started with <b>40</b> seats in <b>1957</b>  Intake increased to <b>60</b> in <b>1978</b>  Intake increased to <b>65</b> in <b>1991</b>  Intake increased to <b>120</b> in <b>2014</b>		
	Accredited by NBA-AICTE in <b>2003</b> for <b>03</b> years  Accredited by NBA-AICTE in <b>2013</b> for <b>05</b> years		
ME <b>Industrial Systems &amp; Drives</b>	Started with <b>18</b> seats in <b>1995</b>  Intake increased to <b>25</b> in <b>2002</b>		
	Accredited by NBA-AICTE in <b>2003</b> for <b>03</b> years		
ME <b>Measurement &amp; Control</b>	Started with <b>10</b> seats in <b>1965</b> (Part Time basis)  Started with <b>12</b> seats in <b>2003</b> (Regular basis)		
Ph.D. <b>Electrical Engineering</b>	QIP centre (Minor) since <b>2011</b>  Research centre of RGPV Bhopal since <b>2000</b>		

MECHANICAL

Programme	Intake
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B.E. in Mechanical Engineering (UG)	120
B.E. in Automobile Engineering (UG)	60
M.Tech in Production Engineering (PG)	18

### 3. Interdisciplinary courses and departments involved

S. No.	Semester	Course	Department Involved
<b>Biotechnology</b>			
1	1	Engineering Chemistry	Applied Science
2	1	Engineering Mathematics -I	Applied Science
3	1	Technical English	Humanities
4	1	Basic Electrical & Electronics Engineering	Electrical and Electronics
5	1	Engineering Graphics	Mechanical Engineering
6	1	Manufacturing Practices	Mechanical Engineering
7	2	Engineering Physics	Applied Science
8	2	Energy, Environment, Ecology & Society	Applied Science
9	2	Basic Computer Engineering	Computer Engineering
10	2	Basic Mechanical Engineering	Mechanical Engineering
11	2	Basic Civil Engineering & Mechanics	Civil Engineering
12	2	Language Lab. & Seminars	Humanities
13	3	BBTL301 Mathematics-III	Applied Science
14	3	BBTS 309 NSS/NCC	NSS/NCC
15	4	BBTS 408 Communication Skills	Department of Humanities
16	5	BBTL 504 Principles of Chemical Engineering	Department of Chemical Engineering

Chemical Engg.

SL. No.	Interdisciplinary Courses	Year	Departments / units involved
1	Engineering Mathematics – I (BCHL101)	1 <sup>st</sup>	Applied Science
2	Engineering Physics (PH101)	1 <sup>st</sup>	Applied Science
3	Communication Skills (HU102)	1 <sup>st</sup>	Humanities
4	Fundamentals of Mechanical Engineering (BCHL103)	1 <sup>st</sup>	Mechanical Engineering

5	Engineering Graphics (BCHL105)	1 <sup>st</sup>	Mechanical Engineering
6	Manufacturing Practices (ME203)	1 <sup>st</sup>	Mechanical Engineering
7	Engineering Chemistry (CY101)	1 <sup>st</sup>	Applied Science
8	Engineering Mathematics – II (MA201)	1 <sup>st</sup>	Applied Science
9	Basic Computer Programming (CS201)	1 <sup>st</sup>	Computer Science Engineering & Information Technology
10	English Language (HU101)	1 <sup>st</sup>	Humanities
11	Environmental Science (AS103)	1 <sup>st</sup>	Civil Engineering
12	Fundamentals of Electrical Engineering (EE102)	1 <sup>st</sup>	Electrical Engineering
13	Engineering Mathematics (CHL301)	2 <sup>nd</sup>	Applied Science
14	Instrumentation & Measurement (CHL303)	2 <sup>nd</sup>	Electrical Engineering
15	Computer Programming - III (CHL306)	2 <sup>nd</sup>	Computer Science Engineering & Information Technology
16	Engineering Mathematics - III (CHL401)	2 <sup>nd</sup>	Applied Science
17	Principles of Management & Managerial Economics (CHL402)	2 <sup>nd</sup>	Humanities
18	Computer Programming - IV	2 <sup>nd</sup>	Computer Science

	(CHL406)		Engineering & Information Technology
19	Advanced Mathematics	M. Tech 1 <sup>st</sup> yr	Applied Science

MCA : Applied Science, Humanities  
Electronics : **Department is teaching courses in CS/IT.**

Civi

Name of the Course	Level of the Course	Departments involved
Engg. Mathematics – I.	U.G. – B.E. Ist Year Ist Semester Civil Engg.	Applied Science
Engg. Chemistry	U.G. – B.E. Ist Year Ist Semester Civil Engg.	Applied Science
Technical English	U.G. – B.E. Ist Year Ist Semester Civil Engg.	Humanities
Engineering Physics	U.G. – B.E. Ist Year I Semester Civil Engg.	Applied Science
Manufacturing Practices	U.G. – B.E. Ist Year Ist Semester Civil Engg.	Mechanical Engineering
Basic Electrical & Electronics	U.G. – B.E. Ist Year Ist Semester Civil Engg.	Electrical / Electronics
Language Lab & Seminar	U.G. – B.E. Ist Year IInd Semester Civil Engg.	Humanities
Basic Computer Engineering	U.G. – B.E. Ist Year IInd Semester Civil Engg.	Computer Science & Engineering
Energy Environmental Ecology & Studies	U.G. – B.E. Ist Year II Semester Civil Engg.	Electrical/ Mechanical
Basic Mechanical Engg.	UG- B.E. Ist Year II Semester Civil Engg.	Mechanical
Engineering Graphics	U.G. – B.E. Ist Year IInd Semester Civil Engg.	Mechanical Engineering
Integrated Ethics & Attitude	U.G. – B.E. IInd Year III Semester Civil Engg.	Humanities
Mathematics – III	U.G. – B.E. IInd Year IIIrd Semester Civil Engg.	Applied Science

Engg. Economics & Mangement	U.G. – B.E. IIIrd Year Vith Semester, Civil Engg.	Humanities
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CSE/IT: NA

ARCH;

**HUMANITIES- 10 UG Courses + 02 PG Courses**  
**APPLIED SCIENCE- 10 UG Courses + 11 PG Courses**

**ELECTRICAL**

- Basic Electrical & Electronics Engineering
- Energy, Ecology, Environment & Society (EEES)

**MECHANICAL**

S. No.	Interdisciplinary Courses	Year	Departments / units involved
1.	Engineering Chemistry (100101)	I	Applied Science
2.	Engineering Mathematics -I (100102)	I	Applied Science
3.	Technical English (100103)	I	Humanities
4.	Basic Electrical & Electronics Engineering (100104)	I	Electronics Engineering
5.	Engineering Physics (100201)	I	Applied Science
6.	Energy, Environment, Ecology & Society (100202)	I	Electrical Engineering
7.	Basic Computer Engineering (100203)	I	Computer Science Engineering & Information Technology
8.	Basic Civil Engineering & Mechanics (100205)	I	Civil Engineering
9.	Language Lab. & Seminar (100206)	I	Humanities
10.	Mathematics III (BMEL-301, BAUL-401)	II	Applied Science
11.	Principles of Management and Managerial Economics (BMEL-601, BAUL-601)	III	Humanities
12.	Advanced statistics and system reliability (560202)	I	Applied Science

**4. Annual/ semester/choice based credit system**

Biotechnology : Semester Credit System

Chemical : B.E. V<sup>th</sup> Semester 2015 -16 batch & B.E. III<sup>rd</sup> Semester 2016 -17 batch admitted under Choice Based Credit System. Other batches are under the semester credit system.

UG (B.E.)		PG (M. Tech)	
Semester	Credits	Semester	Credits
1 <sup>st</sup>	26	1 <sup>st</sup>	32
2 <sup>nd</sup>	26	2 <sup>nd</sup>	32
3 <sup>rd</sup>	32	3 <sup>rd</sup>	20
4 <sup>th</sup>	32	4 <sup>th</sup>	20
5 <sup>th</sup>	32	-----	-----
6 <sup>th</sup>	31	-----	-----
7 <sup>th</sup>	30	-----	-----
8 <sup>th</sup>	30	-----	-----

MCA : Semester  
Electronics : Semester

Civil

<u>Under Graduate Courses</u>	
1	Choice Based Credit System Scheme has been dropped from June 2017 session for all years i.e. from First year to Final year and grading based semester examination scheme is implemented respectively.
<u>Post Graduate Courses</u>	
1	Master of Engineering (M.E.) in Construction Technology & Management – Grade based semester examination system is being followed.
2	Master of Technology (M.Tech) in Environmental Engineering – Grade based Semester examination system is being followed.
3	Master of Engineering (M.E.) in Structural Engineering – Grade based Semester examination system is being followed.

CSE/IT : Semester/ Choice based credit system  
ARCH- Semester - Wise

HUMANITIES-

**semester system**

**Bachelor's of Engineering:**

Technical English (BE I, II)  
Language Lab and Seminar (BE I, II)  
Principles of Management & Managerial Economics (BE V Sem)  
Written & Oral Communication Skills (MCA I Sem)  
Managerial Economics (MCA III Sem)  
Accounting Control (MCA II Sem)  
Management Theory (M.Tech I Sem)  
Technical English (Humanities) (B.Arch. I Sem)

**APPLIED SCIENCE**

**semester system**

**Bachelor's of Engineering:** Engineering Mathematics (I, II, II)  
Discrete structure  
Engineering Physics  
Engineering Chemistry  
**MCA:** Mathematical Foundation of CS  
Operation Research

**ELECTRICAL :** Semester system

**MECHANICAL**

All mechanical and automobile students are merged to grading scheme from July 2017. Earlier the students admitted in July 2015 and July 2016 was under CBCS scheme.

**5. Participation of the department in the courses offered by other departments**

**Biotech-NIL-**  
**Chemical : NA**

**MCA department:**

EDC cell of the institute

:Central Computer Centre

**Elex:**

**Humanities ,applied science and Mathematics Deptt are Taking Classes in our deptt.**  
**all engg branches in Ist year**

**Civil**

<b>Name of the Course</b>	<b>Level of the Course</b>	<b>Department which offers the course</b>
Basic Civil Engg. and Mechanics	U.G. – B.E. Ist Year, Ist & IInd Sem.	All Branches
Structure – I	U.G. – B.Arch Ist Year, Ist Sem.	Architecture

Structure – II	U.G. – B.Arch. IIrd Year, IIIrd Sem.	Architecture
Structure – III (Modern Structural Systems)	U.G. – B.Arch. IIIrd Year, Vth Sem.	Architecture
Structure – IV	U.G. – B.Arch. IIrd Year, IVth Sem.	Architecture
Survey & Levelling	U.G. – B.Arch. IIIrd Year, VIth Sem.	Architecture

### CSE/IT

Subject Name	Semester	Other Department
Basic Computer Engineering	1 <sup>st</sup>	Civil Engineering, Mechanical Engineering, Electrical Engineering, Bio-Technology, Chemical Engineering, Automobile, Electronics & Telecommunication, Electronics Engineering

### ARCH; - NA

**HUMANITIES- Yes, participation in 10 UG Courses + 02 PG Courses**

**APPLIED - Yes, participation in 10 UG Courses + 13 PG Courses**

### ELECTRICAL

- Physics
- Chemistry
- Engineering Drawing
- Fundamental of Electronics Engineering
- Manufacturing Process
- Communication
- Principle of Management and Economics
- Fundamental of Computer Science
- Mathematics-III

### MECHANICAL

S.No.	Subject	Semester	Branch
1	Engineering Graphics	I & II	All Branch
2	Fundamental of Mechanical Engineering	I	Chemical Engineering (for CBCS scheme only)
3	Manufacturing Practice	I & II	All Branch
4	Basic mechanical engineering	I & II	All Branch
5	Prime Movers	IV	Electrical (Grading Scheme)

### 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Assit Professors)

	Sanctioned	Filled
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Biotech		
Professors	-	0
Associate Professors	-	0
Assistant Professors	-	5
Chemical		
Professors	01	Nil
Associate Professors	03	01
Assistant Professors	09	04
MCA		
Professors	01	01
Associate Professors	02	01
Assistant Professors	03	02
Electronics		
Professor	03	02
Associate Professor	06	03
Asst. Professors	10	06
Civil		
Professor	2	1
Associate Professor	5	1
Assistant Professor	16	8
CSE/IT		
Professors		01
Associate Professor		02
Assistant Professor		13
ARCH		



Professors	02	04
AssociateProfessors	04	<b>**02 Nos promoted from Associate Professor to Professor</b>
Asst.Professors	08	08
<b>HUMANITEIS</b>		
Professors	<b>Nil</b>	<b>Nil</b>
Associate Professors	<b>Nil</b>	<b>Nil</b>
Asst. Professors	<b>01</b>	<b>01 Regular 05 Contract/Ad hoc</b>
<b>APPLIED SCIENCE</b>		
Professors	-	<b>01</b>
Associate Professors	-	<b>00</b>
Asst. Professors	-	<b>07 (regular) 04 (contract )</b>
<b>ELECTRICAL</b>		
Professor	-	3
Associate Professor	-	2
Assistant Professor	-	9+3=12
<b>MECHANICAL</b>		
Professors	02	Nil

Associate Professors	07	04
Assistant Professors	10	16
<b>AUTOMOBILE</b>		
Professors	01	Nil
Associate Professors	02	00
Assistant Professors	05	01

**7. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)**

Name	Qualification	Designation		Specialization	No. of Years of Experience	No. of UG/PG/Ph.D. Students guided for the last 4 years	State	Category
		M	F					
Biotech								
Dr Sunita Sharma	B.Sc., M.Sc., PhD	Assistant Professor		Biochemistry	12	PG-20	MP	Gen
HS Chaudhary	B.Sc., M.Sc., M.Tech	Assistant Professor		Biotechnology	10	PG-23	MP	OBC
Vinod Jatav	B.E., M.Tech	Assistant Professor		Biotechnology	6	UG-15; PG-7	MP	SC
Rahul Anand	B.E., M.Tech	Assistant Professor		Molecular Modelling	9	UG-12; PG-5	UP	Gen
Bhaju Jaseja	B.E., M.Tech	Assistant Professor		Biotechnology	-	-	MP	Gen
<b>Chemical</b>								
Dr. S. Prasad	Ph. D.	Associate Professor		Fluidized bed coal combustion	12 (R&D), 1 (Industry), 20 (Teaching)	01		
Prof. S.S. Trivedia	M. Tech	Assistant Professor		Chemical Engineering	6.6	-		
Prof. Swati	M. Tech	Assistant		Chemical Engineering	4	-		

Gupta		Professor	g				
Prof. Anish P. Jacob	M. Tech	Assistant Professor	Chemical Engineering	5.2	-		
Prof. Harendra Rathore	M. Tech	Adhoc Faculty	Chemical Engineering	5	-		
Prof. Krishan Kumar Pathak	M. Tech	Adhoc Faculty	Chemical Engineering	2	-		
MCA							
Dr. R. S. Jadon	MCA, Ph. D.	Professor and Head	Video Data Processing	28	06		
Dr. Anshu Chaturvedi	MCA, Ph. D.	Associate Professor	Adhoc Networks	14 years	02		
P. Sharma	B. E.	Assistant Professors	Cognitive Radio	25	-		
Parul Saxena	MCA	Assistant Professors	Video Processing	04	-		
Ram Pathak	M.Tech.	Assistant Professors		01	-		
Kratika Sharma	M.Tech.	Assistant Professors		NIL	-		
Electronics							
Dr. Sarita Singh Bhadauria	Ph.D.	Professor & Head,	Image processing	30 Year	06		

Dr. P.K. Singhal	Ph.D.	Professor	Microwave Engineerin g	26 Year	06		
Dr. Bimal Garg	Ph.D.	Associate Professor	Control System	30 Year	Nil		
Dr. Rekha Gupta	Ph.D.	Associate Professor	Communica tion Engineerin g	29Year	Nil		
Dr. Vandana Vikas Thakre	Ph.D.	Associate Professor	Microwave Engineerin g	17 Year	Nil		
Dr. Laxmi Shrivastava	Ph.D.	Assistant Professor	Adhoc Networkin g	18 Year	Nil		
Dr. R.P. Narwaria	Ph.D.	Assistant Professor	Digital Signal Processing	11 Year	Nil		
Dr. Karuna Markam	Ph.D.	Assistant Professor	Digital Communic ation	11 Year	Nil		
Prof. Madhav Singh	M. Tech	Assistant Professor	VLSI Designing	05 Year	Nil		
Prof. Deep Kishore Parsediya	M. Tech	Assistant Professor	MEMS	04Year	Nil		
Prof. Pooja Sahoo	M. Tech	Assistant Professor	CCN	04 years	Nil		

Prof. Deepa Sharma	M. Tech	Assistant Professor	Image Processing	7 years	Nil		
Prof. Abhilasha Sharma	M. Tech	Assistant Professor	Embedded system	8 years	Nil		
Prof. Ranbeer singh tyagi	M. Tech	Assistant Professor	Image Processing	05 years	Nil		
Prof. Prashant kumar	M. Tech	Assistant Professor	Microelectronics VLSI Design	Nil	Nil		
Prof. Neha gupta	M. Tech	Assistant Professor	Digital instrumentation	Nil	Nil		
Civil							
Prof. Archana Tiwari	M.E.	Professor & HOD	Structural Engineering	33 Years	NIL		
Dr. Rajeev Kansal	Ph.D.	Professor	Construction Technology & Management	30 Years	NIL		
Dr. S.K. Jain	Ph.D.	Professor	Structural Engineering	27 Years	02		
Dr. M.K. Trivedi	Ph.D.	Professor	Water Resources Engineering , Construction Technology & Management	25 Years	01		
Dr. Sanjay Tiwari	Ph.D.	Professor	Structural Engineering	25 Years	NIL		
Prof. Deepak	M.E.	Associate Professor	Environmental	33Years	NIL		

Rastogi			Engineering				
Prof. A.K. Dwivedi	M.E.	Associate Professor	Construction Technology & Management	32 Years	NIL		
Prof. A.K. Saxena	M.Tech	Associate Professor	Environmental Engineering	29 Years	NIL		
Prof. Gautam Bhadoriya	M.E.	Assistant Professor	Construction Technology & Management	09Years	NIL		
Prof. Aditya K. Agarwal	M.Tech	Assistant Professor	Environmental Engineering	05 Years	NIL		
CSE/IT							
Dr. R.K Gupta	PhD	Professor	Data Mining	29	02 Ongoing		
Prof. Manish Dixit	PhD(pursuing)	Associate Professor	Image Processing	21	nil		
Dr. Akhilesh Tiwari	Ph.D	Associate Professor	Data Mining	11	04 Ongoing		
Prof.Khushboo Agarwal	M.Tech	Assistant Professor	Mobile Adhoc Network	10	NA		
Prof.Punit Kumar Johari	M.Tech	Assistant Professor	Image Processing	12	NA		
Dr. Sanjeev Sharma	Ph.D	Assistant Professor	Data Mining	10	04 Ongoing		
Prof.Jaimala Jha	MTech	Assistant Professor	Image Processing	6	NA		

Prof. Vikas sejwar	M.Tech	Assistant Professor	Computer Networks	8	NA		
Prof. Abhilash sonker	Mtech	Assistant Professor	Informatio n Security	8 years 10 Month	NA		
Prof. Rajeev Kumar Singh	MTech	Assistant Professor	Software Engineeri ng	5	NA		
Prof. Neha Baradwaj	M.Tech	Assistant Professor	Computer Networks & Informatio n Security	4	NA		
Prof. Jamv ant Singh Kumare	B.E., M.E.	Assistant Professor	Image Processin g	05	NA		
Prof. Mahesh Parmar	B.E., M.E.	Assistant Professor	Computer Engineeri ng	09	Nil		
Prof. R.R. Singh	B.E., M.Tech	Assistant Professor	Informatio n Security	08	NIL		
Prof. Amit kumar Manjhwar	B.E, M.Tech	Assistant Professor	Data Mining	06	NIL		
Prof. Vishakha Agarwal	B.Tech, M.Tech	Assistant Professor	Data Mining	4.5 Months	NIL		
Prof. Nishtha Parashar	B.E, M.Tech	Assistant Professor	Image Processin g	1 Year 06 Month	NIL		
Prof. Pooja Mishra	B.E., M.Tech	Assistant Professor	Wireless Sensor Networks	4.5 Month	NIL		
Prof. Abhishek Dixit	B.E, M.TECH	Assistant Professor	Artificial intelligenc e	3year 9 months	NIL		

Prof. Namrata Agrawal	B.E. MTech	Assistant Professor	Information Security	10 Months	NIL		
Prof. Reenu Rajpoot	B.E.,M.Tech	Assistant Professor	Information Security	4 Year	NIL		
Prof. Pallavi Gupta	B.E. , M.Tech	Assistant Professor	Computer Science & Engineering	Fresher	NIL		
Prof. Somya Agarwal	B.E. , M.Tech	Assistant Professor	Advanced Network	Fresher	NIL		
AECH							
Dr. R. K. Pandit	Ph.D	Professor	Construction Management	33	7		
Prof. L. K. Jain	Ph.D(pursuing)	Professor	Construction Technology & Management	36			
Dr.Alok Sharma	Ph.D	Professor	PHE& Environmental Engineering	27			
Dr. S. S. Jadon	Ph.D	Professor	Building Engineering& Management	25			
Dr. A. S. Patil	Ph.D	Assistant Professor	Town & Country Planning	19			
Prof. Richa	M.Arch	Assistant Professor(co	Architectural	00			



Mishra		ntract)	Conservat ion Design				
Prof. Pranshi Jain	M.Arch	Assistant Professor(co ntract)	Architectu ral Conservat ion	00			
Prof.Ksha ma Narwaria	B.Arch	Assistant Professor(co ntract)	Architectu re	24 Month			
Prof. Barkha Soni	B.Arch	Assistant Professor(co ntract)	Architectu re	11			
Prof. Ar. Swapnil Purohit	B.Arch	Assistant Professor(co ntract)	Architectu re	12 Month			
Prof. Anjali Gupta	B.Arch	Assistant Professor(co ntract)	Architectu re	00			
Prof. Priya Gupta	B.Arch	Assistant Professor(co ntract)	Architectu re	00			
HUMANTIES							
<b>Name</b>	<b>Qualificat ion</b>	<b>Designati on</b>	<b>Specializ ation</b>	<b>No. of Years of Exper ience</b>	<b>No. of Ph.D.  St u de nt s  guided for  the  last 4 years</b>		

<b>Sanjeev Khanna</b>	Ph.D.	Assistant Professor	<b>English Fiction</b>	<b>18</b>	<b>00</b>		
<b>Arti Pipariya</b>	Ph.D.	Assistant Professor	<b>Management</b>	<b>15</b>	<b>00</b>		
<b>Anupama Shrivastava</b>	Ph.D.	Assistant Professor	<b>English Fiction</b>	<b>07</b>	<b>00</b>		
<b>Urvashi Garud</b>	MBA	Assistant Professor	<b>Management</b>	<b>09</b>	<b>00</b>		
<b>Rahul Mishra</b>	M. Phil	Assistant Professor	<b>English</b>	<b>03</b>	<b>00</b>		
<b>Manju Ojha</b>	P.hD	Assistant Professor	<b>English</b>	<b>09</b>	<b>00</b>		
APPLIED SCIENCE							
<b>Dr. Abhay Mishra</b>	Ph.D.	Professor	<b>Digital communication nanotechnology</b>	<b>28</b>	<b>02</b>		
<b>Dr. V.P. Shinde</b>	Ph.D.	Assistant Professor	<b>Queuing Theory</b>	<b>15</b>	<b>01</b>		
<b>Dr. D.K. Jain</b>	Ph.D.	Assistant Professor	<b>Special Function</b>	<b>16</b>	<b>02</b>		
<b>Dr. Anjula Gaur</b>	Ph.D.	Assistant Professor	<b>Organic Chemistry</b>	<b>10</b>	<b>00</b>		
<b>Dr. Shourabh Bhattacharya</b>	P.hD	Assistant Professor	<b>Atmospheric Science</b>	<b>09</b>	<b>00</b>		
<b>Prof Jitendra Kumar</b>	M. Phil	Assistant Professor	<b>Queuing Theory</b>	<b>09</b>	<b>00</b>		
<b>Prof Angad S</b>	M.Sc. (NET)	Assistant Professor	<b>Epidemiology</b>	<b>09</b>	<b>00</b>		

<b>Ojha</b>							
<b>Dr. Uday Pratap Singh</b>	<b>Ph.D.</b>	<b>Assistant Professor</b>	<b>Soft computing</b>	<b>11</b>	<b>00</b>		
<b>Dr Preeti Gupta</b>	<b>Ph.D.</b>	<b>Assistant Professor (Contract)</b>	<b>Organic Chemistry</b>	<b>5</b>	<b>00</b>		
<b>Dr Tanushksha Parashar</b>	<b>Ph.D.</b>	<b>Assistant Professor (Contract)</b>	<b>In Organic Chemistry</b>	<b>5</b>	<b>00</b>		
<b>Prof. Shweta Shrivastava</b>	<b>M.Phil.</b>	<b>Assistant Professor (Contract)</b>	<b>Special functions</b>	<b>06</b>	<b>00</b>		
<b>Sanat Kumar</b>	<b>P.h.D.</b>	<b>Assistant Professor (Contract)</b>	<b>Soft condensed matter physics</b>	<b>01</b>	<b>00</b>		
<b>ELECTRICAL</b>							
<b>Dr. Laxmi Srivastava</b>	<b>Ph.D.</b>	<b>Head &amp; Professor</b>	<b>AI Applications to Power System</b>	<b>34</b>	<b>4</b>		
<b>Dr. Manjaree Pandit</b>	<b>Ph.D.</b>	<b>Professor</b>	<b>Evolutionary optimization techniques for Power System optimization</b>	<b>32</b>	<b>2 +1 Submitted</b>		
<b>Dr. Arun Kumar</b>	<b>Ph.D.</b>	<b>Professor</b>	<b>Application of Soft Computing</b>	<b>28</b>	<b>7 +1</b>		

Wadhvani			g Technique s in Biomedic al signals		Submitted		
Ashish Patra	ME	Associate Professor	Control System	28	-		
Dr. Sulochana Wadhvani	Ph.D.	Associate Professor	Condition monitorin g of Electrical Machine	22	3 +(2) submitted		
Hari Mohan Dubey	ME, Ph.D.(Pursui ng)	Assistant Professor	Industrial System and Drives	14	-		
Dr. Shishir Dixit	Ph.D.	Assistant Professor	Heavy Electrical Equipmen t	20	-		
Rakesh Narvey	ME	Assistant Professor	High voltage engineerin g	09	-		
Himmat Singh	ME,Ph.D.(P ursuing)	Assistant Professor	Electrical Machines	11	-		
Dr. Vijay Bhuria	Ph.D.	Assistant Professor	Heavy Electrical Equipmen t	14	-		
Kuldeep Kumar Swarnkar	ME	Assistant Professor	Microproc essors	06	-		

Praveen Bansal	M.Tech.	Assistant Professor	Electrical Machines	04	-		
Vishal Chaudhary	ME Ph.D.(Pursuing)	Assistant Professor	Power System	03	-		
Vijay Kumar Tewari	M.Tech, Ph.D.(Pursuing)	Assistant Professor	Power Electronic s Machine and Drives	10	-		
Raj Kumar Bansal	ME	Assistant Professor	Electronic s Instrumentation	06	-		
Shubham Gupta	ME	Assistant Professor	Electronic s Instrumentation	05	-		
Shubhu Saurav	ME	Assistant Professor	Electronic s Instrumentation	-	-		
MECHANICAL							
Dr. Manoj Kumar Gaur	Ph. D.	Associate Professor	Solar Thermal	16	-		
Dr. Pratesh Jayaswal	Ph. D.	Associate Professor	Tribology and Maintenance	16	--		
Dr. C. S. Malvi	Ph. D.	Associate Professor	Industrial Design, Solar Energy	19.5	-		
Dr. Manish Kumar Sagar	Ph. D.	Associate Professor	Manufacturing Systems	15	-		

Prof. R. P. Kori	M. Tech	Assistant Professor	Metallurgical Engineering	14	-		
Dr. Avadesh K. Sharma	Ph. D.	Assistant Professor	Machine Design, Vibration	16	-		
Prof. Vedansh Chaturvedi	M. Tech	Assistant Professor	Unconventional machine, optimization	07	-		
Dr. JyotiVimal	Ph. D.	Assistant Professor	CAD, Vibration, FEM, Materials, Optimization	09	-		
Prof. Dinesh K. Kasdekar	M. Tech	Assistant Professor	CIM, Production engineering	06	-		
Prof. Sharad Agrawal	M. Tech	Assistant Professor	CAD/ CAM	08	-		
Prof. Vaibhav Shivhare	M. Tech	Assistant Professor	Mechanics of material, Vibration	05	-		
Dr. Amit Aherwar	Ph.D.	Assistant Professor	Tribology, Composite materials, Advanced Machining, Optimization,	06	-		
Prof. Bhupendra Pandey	M. Tech	Assistant Professor	Thermal, Automobile	13	-		
Prof. Akash Sood	M. Tech.	Assistant Professor	Energy Technology, Carbon Capture and	01	-		

			Sequestrati on				
Prof. Amit Soni	M. Tech.	Assistant Professor	Production Engineerin g	03	-		
Prof. Hemlata Sahu	M. Tech.	Assistant Professor	(PIS) Production Industrial System	05	-		
Prof. Deepika Kushwaha	M. Tech.	Assistant Professor	Machine Design	-	-		
Prof. Vikash Agarwal	M. Tech.	Assistant Professor	Production Engineerin g	06	-		
Prof. Sumeet K. Singh	M. Tech.	Assistant Professor	Automobil e Engineerin g	02	-		
Prof. Vinod Mahor	M. Tech.	Assistant Professor	Production Engineerin g	07	-		
Prof. Anand Dhonde	B.E.	Assistant Professor	Supply Chain Manageme nt	30	-		

### 8. Percentage of classes taken by temporary faculty – Program-wise information

B.E. Biotechnology: ~62%  
Chemical

Programme	Theory Lectures	Practical Classes
UG	43.86%	6.8%
PG	62.12%	1.51%

MCA: 40%  
Elex

Year	Branch	
B.E. I Year	EC	00 %
	ET	00 %
B.E. II Year	ET	50 %
	EC	55%
B.E. III Year	ET	33%
	EC	61 %
B.E. IV Year	EC	60 %
M.E.	CCN	33%
M.Tech.	M.W.	40%

Civil

<u>Under Graduate Courses</u>	<b>% Lectures Delivered</b>	<b>% Practical Classes Taken</b>
Bachelor of Engineering (B.E.) in Civil Engineering – First Year	NIL	50%
Bachelor of Engineering (B.E.) in Civil Engineering – Second Year	25%	65 %
Bachelor of Engineering (B.E.) in Civil Engineering – Third Year	50%	60%
Bachelor of Engineering (B.E.) in Civil Engineering – Final Year	35 %	65 %
<u>Post Graduate Courses</u>	<b>% Lectures Delivered</b>	<b>% Practical Classes Taken</b>
Master of Engineering (M.E.) in Construction Technology & Management	33%	75%
Master of Technology (M.Tech) in Environmental Engineering	13 %	50 %



Master of Engineering (M.E.) in Structural Engineering	40%	50%
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CSE/IT :  $(240/528)*100 = 45\%$

**ARCH-**

Programme	UG	PG
	40	40

**HUMANTIES**

<b>Bachelor's of Engineering</b>	<b>First Year</b>	<b>60%</b>
<b>Bachelor's of Engineering</b>	<b>Third Year</b>	<b>30%</b>
<b>Master's of Computer Application</b>	<b>I/II Year</b>	<b>05%</b>
<b>M. Tech.</b>	<b>I Year</b>	<b>05%</b>

**APPLIED SCIENCE**

<b>Bachelor's of Engineering</b>	<b>First Year</b>	<b>40%</b>
<b>Bachelor's of Engineering</b>	<b>Third Year</b>	<b>50%</b>
<b>Master's of Computer Application</b>	<b>I/II Year</b>	<b>30%</b>
<b>M. Tech.</b>	<b>I Year</b>	<b>10%</b>

ELECTRICAL -9.5%

**MECHANICAL**

Programme	Theory Lectures	Practical Classes
UG	45%	26.5%
PG	0%	0%

**9. Program-wise Student Teacher Ratio**

S. No.	Program	Student Teacher Ratio
1	B.E. Biotechnology	9.4:1
2	M.Tech Biotechnology	1.2:1
<b>Chemical</b>		
	<ul style="list-style-type: none"> <li>• UG :- 32 : 1</li> <li>• PG :- 2 : 1</li> </ul>	
<b>MCA</b>		
	15:1	

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Elex.

Year	Branch	
B.E. I Year	EC	--
	ET	--
B.E. II Year	ET	7:1
	EC	16:1
B.E. III Year	ET	8:1
	EC	12:1
B.E. IV Year	EC	14:1
M.E. I Year	CCN	3:1
M.Tech. I Year	M.W.	2:1
M.E/M.tech CCN/MW- II Year		

Civil

<u>Under Graduate Courses</u>	Student Teacher Ratio
Bachelor of Engineering (B.E.) in Civil Engineering	20
<u>Post Graduate Courses</u>	Student Teacher Ratio
Master of Engineering (M.E.) in Construction Technology & Management	10
Master of Technology (M.Tech) in Environmental Engineering	7
Master of Engineering (M.E.) in Structural Engineering	4

CSE/IT

Course	Students Teacher Ratio
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Computer Science & Engineering	636/11=57.81
Information Technology	318/13=24

ARCH-1:10

HUMANTIES

<b>Bachelor's of Engineering</b>	<b>First Year</b>	<b>1:65</b>
<b>Bachelor's of Engineering</b>	<b>Third Year</b>	<b>1:65</b>
<b>Master's of Computer Application</b>	<b>I/II Year</b>	<b>1:65</b>
<b>M. Tech.</b>	<b>I Year</b>	<b>1:30</b>

APPLIED SCIENCE

<b>Bachelor's of Engineering</b>	<b>First Year</b>	<b>1:65</b>
<b>Bachelor's of Engineering</b>	<b>Third Year</b>	<b>1:65</b>
<b>Master's of Computer Application</b>	<b>I/II Year</b>	<b>1:40</b>
<b>M. Tech.</b>	<b>I Year</b>	<b>1:30</b>

ELECTRICAL – 23:1

MECHANICAL

- UG:- 37: 1
- PG:- 12: 1

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

	Sanctioned	Filled
Biotech		
Support staff (technical)	-	0
Administrative staff	-	1
Chemical		
Support staff (technical)	-	1
Administrative staff	-	1
MCA		
Technical	02	02
Administrative	01	00

Elex		
Technical support staff	--	06
Administrative staff	--	01
Civil		
Technical Support Staff		07
Administrative Staff		02
ELECTRICAL		
<b>Technical</b>	-	<b>6</b>
<b>Administrative</b>	-	<b>1</b>
MECHANICAL		
Support staff (technical)	6	5
Administrative staff	1	NIL

**CSE/IT**

Name	Designation
Mr. Shankar Benarjee	C.O./Technical Assistant
Mr. Sanjeev Kumar Rajput	Instructor
Mr. Imteyaz Hussain	Technical Assistant
Mr. Sanjay Arolia	Technical Assistant
Mr. Santosh Sharma	Lab Technician

Mr. Shivnarayan	Class IV
Mr. Anil Kumar	Class IV
Mr. Koushlendra	Class IV

ARCH

	Sanctioned	Filled
Technical	04	04
Administrative	02	01

HUMANTIES- NIL  
APPLIED- NIL

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

biotech-NIL-

Chemical Nil

MCA : Nil

**MECHANICAL**

Name of Faculty	Title of Project	Funding Agency
Dr. M. K. Gaur	Heat and Mass Transfer Analysis of Hybrid Solar Dryer with Uniform Heating	AICTE
Dr. M. K. Gaur	Perform analysis of solar vapor absorption refrigeration system	AICTE

Electronics

**Total Grants received**

Name of the funding agency	Project Title	Amount sanctioned (Rs in Lakhs.)
DST	Design and analysis of Microwave Bootlace Lens	1.15
AICTE	Computer aided design and analysis of Microwave planar circuits	6
AICTE	Research work	12
UGC	Computer aided design and analysis of broadband Microstrip Antenna	4.33
MOBROB	Development of Microwave Laboratory	10

DST FIST	Project for Image processing Laboratory	14.5
AICTE	Modernization of Computational Electromagnetic laboratory	10.08
DST	Design and development of Microwave Bootlace lens for Multiple Beam forming	6.12
AICTE	Design and Analysis of Microwave Planar Circuits	12.35
MOBROB	Development of Antenna and Radiation laboratory	5.64
IEI	Congestion Control in Ad hoc Networks	0.5
AICTE	Spectrum sensing for Cognitive radio Applications	6.6
MPCST	Fuzzy Logic based Congestion Control for Mobile Adhoc Networks	3.05

### Ongoing projects

Name of faculty	Name of the funding agency	Project Title	Amount sanctioned (Rs in Lakhs.)
Dr. Sarita singh bhadouria, and Dr.Laxmi shrivastava	MPCST	Fuzzy Logic based Congestion Control for Mobile Adhoc Networks	3.05

### Civil

S.No.	Name of Faculty	Research Project	Funding Agency	Grants Received
1.	Dr. R. Kansal Dr. M.K. Trivedi	Optimization Techniques in Time Cost Trade off analysis in civil engineering projects.	AICTE	Rs. 12.75 lacs

### CSE/IT

S.No	Title of the Project	Name of the Funding Agency	Name of PI/Co-PI	Total Grant (Sanctioned)	Duration Year/Status
1	An Efficient Multimodal Identification System with Reduced	Department of Science and Technology	Dr. R.K. Gupta Prof.	Rs. 29,95,200/-	30.12.2011 To

	Recognition Time	(DST), Govt. of India	Poonam Sharma		30.12.2014 <b>(Completed)</b>
2	Development Of Flexible Framework For Mining Association Rules	AICTE (Under RPS Scheme)	Dr. R .K. Gupta Dr.Akhilesh Tiwari	Rs. 500000/-	01.12.2011 To 01.12.2013 <b>(Completed)</b>
3	MODROB	AICTE (Under MODROB Scheme)	Dr. R.K. Gupta	Rs. 500000/-	09.12.2011 To 09.12.2012 <b>(Completed)</b>
4	Design and Development of soft sensors for industrial processes	AICTE	Dr. Sanjeev Jain Prof. Vandana Sakhere	Rs. 1500000/-	2011-2012 <b>(Completed)</b>

#### ARCH- NA

#### APPLIED SCIENCE

S. No.	Name of the Schemes	Title of Project	Name of PI	Name of Co-PI	Grant Sanctioned
1.	MPCST	<b>Studies on removal of dyes from industrial effluents using eco-friendly non-conventional bio-absorbent</b>	Dr. Anjula Gaur	-	Rs. 4.28 Lac

#### ELECTRICAL

S. No.	Sponsoring Agency	Title of project	Principle Investigator	Amount of Grant (Rs)	Status
1	AICTE,	Modernizations of High Voltage	Dr. A.K.	10.00 Lac	Ongoing

	(MODROB)	Testing Lab	Wadhvani		
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### Projects completed in 2016-17.

S. No.	Sponsoring Agency	Title of project	Principle Investigator	Amount of Grant (Rs)	Status
2	UGC (MRP)	Soft-Computing Techniques for Optimal Allocation of FACTS Devices to Improve Power System Performance	Dr. Laxmi Srivastava	11.53 Lac	Completed
3	UGC Research Award-Phase II	Post Doctoral Fellowship (UGC Research Award)	Dr. Manjaree Pandi	16.81 Lac	UC Sent (01/05/16)
		TOTAL		28.34 Lacs (approx.)	

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**  
**Bio-NIL-**  
**HUMANTIES- NIL**

**Chemical: nil**  
**MCA : Nil**  
**Elex: 14.5lacs.**

**MECHANICAL**

Name of Faculty	Title of Project	Funding Agency
Dr. C. S. Malvi	Development of Multi-purpose Solar Lamp	DST
Dr. C. S. Malvi	Up-gradation of MOM Lab (MODROB)	AICTE

**Civil**

S.No.	Project	Funding Agency	Grants Received
1.	Optimization Techniques in Time Cost Trade off analysis in civil engineering projects.	AICTE	Rs. 12.75 lacs
2.	Seismic Protection of Heritage Building	AICTE	Rs. 13.5 lacs



3.	Enhancement of Testing facility in Concrete Lab	AICTE	Rs. 3.51 lacs
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**CSE/IT**

S.No	Title of the Project	Name of the Funding Agency	Name of PI/Co-PI	Total Grant (Sanctioned)	Duration Year/Status
1	An Efficient Multimodal Identification System with Reduced Recognition Time	Department of Science and Technology (DST), Govt. of India	Dr. R.K. Gupta Prof. Poonam Sharma	Rs. 29,95,200/-	30.12.2011 To 30.12.2014 <b>(Completed)</b>
2	Development Of Flexible Framework For Mining Association Rules	AICTE (Under RPS Scheme)	Dr. R .K. Gupta Dr.Akhilesh Tiwari	Rs. 500000/-	01.12.2011 To 01.12.2013 <b>(Completed)</b>
3	MODROB	AICTE (Under MODROB Scheme)	Dr. R.K. Gupta	Rs. 500000/-	09.12.2011 To 09.12.2012 <b>(Completed)</b>
4	Design and Development of soft sensors for industrial processes	AICTE	Dr. Sanjeev Jain Prof. Vandana Sakhere	Rs. 1500000/-	2011-2012 <b>(Completed)</b>

**ELECTRICAL**

S. No.	Sponsoring Agency	Title of project	Principle Investigator	Amount of Grant (Rs)	Status
1	DST(FIST)	Setting up of power components and system simulation lab	Dr. Laxmi Srivastava	38.00 Lac	complete

2	AICTE	Modernization of the control system Laboratory	Dr. Laxmi Srivastava	14.00 Lac	complete
3	AICTE (MODROB)	Modernizations of Measurement & Instrumentation Lab	Dr. A.K. Wadhvani	8.00 Lac	complete
4	AICTE (MODROB)	Modernization of Electrical Machine Lab	Dr. S. Wadhvani	11.00 Lac	complete
5	AICTE, (MODROB)	Modernizations of High Voltage Testing Lab	Dr. A.K. Wadhvani	10.00 Lac	Ongoing
6	AICTE, (MODROB)	Modernization of Power Components & System Simulation Lab	Dr. Laxmi Srivastava	11.00 Lac	complete
Total			92 Lac )Approx)		

ARCH-

\* a) Publicationperfaculty

**JOURNAL PUBLICATIONS:**

- 1 A. Choudhary, Tyagi. T & **R.K. Pandit** , “**Comparison Between BRTS and Personnel Vehicle as Travel Choice In Indore**”, **STM Journal of Trends in Transport Engineering and Applications**, Volume 2, Issue 3, ISSN: 2394-7284(online) Page 12-18
  1. **Pandit.R.K&Somya Dubey**“**The Rural-Urban Metamorphosis**” **Journal of Advanced Research in Civil and Environmental Engineering**,ISSN: 2393-8307( August 2015)Vol II, No 2, Page 6-11.
  2. Soma A.Mishra&**Pandit.R.K** “**Evaluation of Urban Transformation of Indore City**”, **An International Research Journal** (Indexed & Refereed Research Journal,) ISSN-0974-2832, (Print) E-ISSN-2320-5474, May-August 2015, (Combined), VOL-VII,\*ISSUE-76-79, Page 22-24
  3. Soma A.Mishra&**Pandit.R.K**, “**Role of Urban Transformation and Environmental Design in Social Sustainability - A Case of Indore City**” ,**International Journal of Engineering and Technical Research (IJETR)** ISSN: 2321-0869 (O) 2454-4698 (P), Volume-3, Issue-7, July 2015,Page 173-177
  4. Soma A.Mishra, G V Kulkarni &**Pandit.R.K**, “**Comparative Analysis of Urban Transformation at Four Locations of Indore City by Anova**”,**International Journal of Research – Granthaalayah**, ISSN- 2350-0530(O) ISSN- 2394-3629(P), Vol.3(Iss.7):July,2015, Page 31-39
  5. A.Choudhary,Thakur M S &**R.K.Pandit**, “ **Vivid Sustainable Building Materials in various Topographical Regions in India**” , **Journal of Construction Engineering, Technology and Management**ISSN: 2249-4723(online), ISSN: 2347-7253(print) Volume 5, Issue 2, Page 61-73.

6. **Arihant Jain & Pandit.R.K, "Attributes of Sustainability"**  
Journal of Advanced Research in Civil and Environmental Engineering, ISSN: 2393-8307, Vol 1, No 1 ( September 2014)  
Page 31-41
7. **Soma A.Mishra,PrakoolSoni&Pandit.R.K, "Water Proofing Systems in Building Construction"** International Journal of Combined Research & Development (IJCRD) eISSN:2321-225X;pISSN:2321-2241 Volume: 3; Issue: 1; July -2014 Page 54-66
8. **Soma A.Mishra&Pandit.R.K, "Space Syntax Approach for Analyzing Crime Preventive Urban Design: Concept Review"** Journal of Advanced Research in Construction and Architectural Engineering, Vol 1, No 1 ( June 2014) Page 18-24
9. **Pandit.R.K, "Futuristic Management Information System"**  
Journal of Advanced Research in Civil and Environmental Engineering,ISSN: 2393-8307 (June 2014)Vol 1, No 1, Page 1-8.
10. **Choudhary.A, Maheshwari.S and Pandit.R.K, Article on "SMART PARKING SYSTEM: FOR NARROW SPACES"**  
Published in "Journal" of Construction Engineering Technology and Management. (JoCETM) ( Eissn:2249-4723,Pissn: 2347-7253)
11. **Choudhary.A, Dogne.N and Pandit.R.K, Article on "Super-performing Construction Materials"** in "Journal of Advanced Research in Construction Architectural Engineering.. ISSN: 2393-8307 Vol 2(Nov 2014).
12. **Choudhary.A, Dogne.N, Paper Published in E-proceeding titled "Smart Construction Material"** in National Level Conference on Advance Construction Materials and Techniques organized by Civil Engineering Department MITS under TEQIP phase II on 27<sup>th</sup> Sept.2014
13. **Choudhary.A, Dogne.N and Thakur M. S.. Paper Published in E-proceeding titled "Solar Passive Architecture"** in National Level Conference on Advance Construction Materials and Techniques organized by Civil Engineering Department MITS under TEQIP phase II on 27<sup>th</sup> Sept.2014
14. **Soma A.Mishra&Pandit.R.K, "Space Syntax Approach for Analyzing Crime Preventive Urban Design: Concept Review"** Journal of Advanced Research in Construction and Architectural Engineering, Vol 1, No 1 ( June 2014)
15. **Pandit.R.K, "Futuristic Management Information System "** Journal of Advanced Research in Civil and Environmental Engineering, Vol 1, No 1 ( June 2014)
16. **Pandit.R.K, "Re engineering the Engineered Construction Organization"** Journal of Construction Engineering, Technology & Management, ISSN : 2249-4723, Volume 3, Issue 3, December 2013 Page 54-66.
17. **Soma A.Mishra&Pandit.R.K, "COMPARATIVE ANALYSIS OF BHOPAL, INDORE AND GWALIOR'S URBAN TRANSFORMATION"** International Journal of Combined Research & Development (IJCRD) eISSN:2321-

- 225X;pISSN:2321-2241 Volume: 1; Issue: 5; September –2013, Page No. 01-09
18. Vijay Kumar & Pandit.R.K “ **Traffic and Transportation Problems of Metro Cities: Case of Meerut, Uttar Pradesh** American Journal of Engineering Research (AJER) e-ISSN: 2320-0847 p-ISSN : 2320-0936 Volume-2, Issue-4, pp-138-151(April 2013)
  19. Soma A.Mishra&Pandit.R.K, “**Global Dynamism and Local Identities in Reference to Urban Design and Urban Planning**”Indian Journal of Scholarly Research” ISSN: 2278-8271 Volume 2, Issue 4 (April 2013), Page No.04-05
  20. Vijay Kumar &Pandit.R.K“**Reforms in Urban Planning and Development Process: Case of Uttar Pradesh, India**”International Journal of Engineering Inventions” e-ISSN: 2278-7461, p-ISSN: 2319-6491 Volume 2, Issue 6 (April 2013)
  21. Vijay Kumar &Pandit.R.K “**Problems of Solid Waste Management in Indian Cities**” International Journal of Scientific Research Publication ISSN 2250-3153, Volume 3, Issue 3, March 2013, Page 1-9.
  22. Soma A.Mishra&Pandit.R.K, “**Urban Transformation and Role of Architecture towards Social Sustainability**”International Journal of Engineering Research and Development e-ISSN: 2278-067X, p-ISSN : 2278-800X, www.ijerd.com Volume 5, Issue 7 (January 2012), Page No.16-20
  23. Vijay Kumar &Pandit.R.K “**Problems of Urban Villages: Challenge for Planners**” Journal of Architecture,CCA research Cell. ISSN 2249-9326, Volume 2, Decemeber 2012, Page 36-43.
  24. **Pandit.R.K** “Attributing Knowledge Management System”**Journal of Management, Value & Ethics** Vol. III,No.IV, Oct. – Dec. 2012, No. II,,ISSN No. **2249-9512**, Page No. 07-14
  25. Mishra A . Soma &**Pandit R.K**, Sustainability & the Relevance of Urban Green, **Global Journal of Engineering and Applied Science**, ISSN No 2249-2631(online)/ 2249-2623(Print) 2011(1) 4 Page 92-96.
  26. Mishra A . Soma &**Pandit R.K**, Sustainability Urban Infrastructure, **International Journal of Business and Technology Research**, Vol 4 No1, ISSN No 1941-9414 July 2011(1) 4 Page 554-560.
  27. Patil.A.S&**Pandit R. K**, Urbanization Trends, Growth Patterns In Indian Context, **The Icfai University Journal of Architecture**,Vol II,No.2, Page No.157-162.
  28. Patil.A.S, &**Pandit. R.K** “Socio-Economic Development Indicators A critical appraisal of Gwalior Region” **International Journal of Advanced Engineering Technology (IJAET)**Vol.I/IssueIII/October-Dec,2010,ISSN No.0976-3945,Page No. 256-265.
  29. Chaurasia.D, **Pandit.R.K**. “City Parking Management Strategies: A Survey Based Statical Analysis for Gwalior”

- The International Journal of Emerging Technologies and Application on Engineering, Technology and Sciences (IJ-ETA-ETS), Vol. 02: Issue 02, July 2009 – December 2009, ISSN No. 0974-3588, Page No. 598 - 603.**
30. **Pandit.R.K** “Urbanization of Third World Countries and Shelter” **NICMAR Journal of Construction Management**, January –March 2009 Vol XXIV, No. 1, ISSN No.0970-3675, Page No. 38-47.
31. Chaurasia.D, **Pandit.R.K.**,Ranjan A. “Urban Traffic Characteristics: A Case Study of Gwalior” **The Spatio-Economic Development Record (SDR)**, Vol. 15, No. 14, July -August. 2008, ISSN No. **0971-4944**, Page No. 16-21.
- 30 Patil.A.S, &**Pandit. R..K**, “Urban Morphological Study of Gwalior” Vol 73 Issue 09, **The Journal of Indian Institute Architects (JIIA)**, September 2008. ISSN No. **0019-4913**, Page No. 21-24.
- 31 Chaurasia.D, **Pandit.R.K.**,Ranjan A. “Intelligent Parking Management System-An Overview ” **The Journal of Indian Institute Architects (JIIA)**, Vol. 73, Issue 08, August. 2008, ISSN No. **0019-4913**, Page 12-14.
- 32 Chaurasia.D, **Pandit.R.K.**,Ranjan A. “Impact of Motorised Vehicle on Indian Road Infrastructure: A Critical Appraisal” **Journal of Institute of Town Planners of India (ITPI Journal)**, Vol.5 No.3, July- September. 2008, ISSN No.**0537-9679**, Page No. 43-49.
- 33 Tomar.Pallavi,Patil.Anjali&**Pandit.R.K**, “Planning of Sanitation Systems in Peri Urban Slums” **Journal of Institute of Town Planners of India (ITPI Journal)**, Vol. 5 No. 2, April- June. 2008, ISSN No.**0537-9679**, Page No. 66-72.
- 34 **Pandit.R.K.** “TPAS in Technical Education”. **The Indian Journal of Technical Education**. New Delhi, Vol I, No.1, January –March 2008. ISSN No.**0971-3034**, Page No. 60-66.
- 35 Chaurasia.D, **Pandit.R.K.**,Ranjan A. “Fractal Geometry an Useful Architectural Design Element: An Overview” **The Journal of Indian Institute Architects (JIIA)**, Vol. 73, Issue 03, March. 2008, ISSN No. **0019-4913**, Page No. 25-26.
- 36 Chaurasia.D, **Pandit.R.K.**, Ranjan A. “Travel Behaviour Change through College Travel Planning: A Critical Appraisal of Gwalior City” **The Journal of Indian Institute Architects (JIIA)**, Vol. 73, Issue 01, Jan. 2008, ISSN No. **0019-4913**, Page No. 15-16.
- 37 Chaurasia D., **Pandit R. K.**, “Sustainable Urban Transport Applications: A Need of Present Urban Setup” **National Registered Journal “Research Link”** Issue – 42 (A), Vol. VI (7) , September 2007, ISSN No. - **0973 - 1628**, Page No. 132-136.
- 38 Chaurasia D., **Pandit.R.K.** “Transport Technology & Management: Road Map of Development of City” **NICMAR Journal of Construction Management**, Pune, Vol. XXI Oct. – Dec. 2006, No. IV, ISSN No. **0970 - 3675**, Page No. 34-36
- 39 **Pandit.R.K** “Links and Innovations in Construction Organization”**NICMAR Journal of Construction**



- Management**, Vol. XXI, No. II, Oct. - Dec. 2006, No. II, **April-June 2006, ISSN No. 0970 - 3675**, Page No. 39-43
- 40 **Pandit.R.K.** "Construction Environment through Stabilized Labour Matrix", *New Building Materials & Construction World*. New Delhi, Vol. 11, No. 6, December. 2005, **ISSN No. 0973 - 0591**, Page No. 114, 120 & 121.
- 41 **Pandit.R.K.** "Construction Industry Behavior and Re-Engineering" **NICMAR Journal of Construction Management**, Vol. XV, No. I, Jan-March 2000, **ISSN No. 53-59**.
- 42 **Pandit.R.K. & R.N. Munshi.** "Information Concepts and Systems in Construction Organization" **NICMAR Journal of Construction Management**, Vol. XIV, No. I, Jan-March 1999, **ISSN No. 0970-3675**, Page .39-47.
- 43 **Pandit.R.K. & R.N. Munshi.** "Institutional Culture Management" **University News**" Vol. 37, No. 6, February 1999, **ISSN No. 0566-2257**, Page No. 1, 2 & 11.
- 44 **Pandit.R.K.** "Performance Based Career Advancement in Technical Education". **The Indian Journal of Technical Education**, Vol. 22, No. 1, Jan-Mar 1999, **ISSN No. 0971-3034**, Page No. 37-40.
- 45 **Pandit.R.K. & R.N. Munshi.** "Construction Scenario of Public Works Department" **New Building Materials & Construction World**, Vol. 4, No. 6, December 1998, Page No. 36-43.
- 46 **Pandit.R.K. & R.N. Munshi.** "Indian Construction Industry", **New Building Materials & Construction World**, Vol. 4, No. 4, October 1998, Page No. 33-38.
- 47 **Pandit.R.K. & R.N. Munshi.** "Management of Technical Education". *The Indian Journal of Technical Education*, Vol. 21, No. 1, Jan-Mar 1998, **ISSN No. 0971-3034**, Page 23-29.
- 48 Chaurasia D & **Pandit R. K.**, Parking Management Strategies for Gwalior, **The Icfai University Journal of Architecture**, Vol II, No. 1, Page No. 57-65.

#### X SEMINAR/CONFERENCE PUBLICATIONS:

1. Dubey Meenakshi, **Pandit, R.K.**, " Learning from Traditional Building Cultures" International Conference on Contemporary Architecture - Beyond Corbusierism , organized by IIA Chandigarh Chapter from 14<sup>th</sup> to 16<sup>th</sup> October, 2011.
2. Mishra A . Soma & **Pandit R.K.**, Urban Transformation of Indore, **National Seminar SURJAN 2011**, Organized by CED, IES IPSA, Indore Page 01-08.
3. Jain Minakshi, **Pandit R.K.**, "Regenerating Community Based Sustainable Villages of Human Mass" International Transatlantic Studies Conference, organized by School of Environment, University of Dundee, Scotland, UK on 11-14 July 2011.
4. Chaurasia.D, **Pandit.R.K.**, "Green Travel Infrastructure Management : Approach Towards Sustainable Development" International Conference on Urbanism & Green Architecture" organized by NIT, Hamirpur and IIA Chapter Chandigarh on 30<sup>th</sup> & 31<sup>st</sup> October 2010.
5. Chaurasia.D, **Pandit.R.K.**, Ranjan A. "Impact of major traffic Corridor Movement (Highway) on Urban Setup: A Case of Gwalior Region" 57th National Town & Country Planners Congress, Institute of Town Planners of India (ITPI), NIO Auditorium, Dona Paula, Tiswadi, Goa, January, 23<sup>rd</sup> -25<sup>th</sup>, 2009.
6. **Pandit R. K.**, Patil Anjali "Application of GIS tools in Urban Built Resource Management" 10-12 December 2008 , IIA National Convention (NATCOM 2008) Bangaluru.
7. **Pandit R. K.**, "Application of cosmic Energy in Sustainable Planning" National Workshop on Sustainable Development for Hill Areas" organized by NIT , Hamirpur, 31<sup>st</sup> October & 1<sup>st</sup> November, 2008.

8. **Chaurasia D., Pandit R. K.,** "Sustainable Urban Development with Emphasis on Healthy Transport Planning "International Conference on Emerging Technologies and Applications in Engineering, Technology and Sciences", Saurashtra University, Rajkot, Gujarat, 13-14,Jan 2008.
9. TomarPallavi, Patil S. Anjali, **Pandit R. K.,** "Transportation Planning Through Remote Sensing and GIS " National Seminar on Infrastructure Management for New World Order, Sponsored by AICTE, N. Delhi Organised by Department of Architecture, MITS, Gwalior, 28<sup>th</sup> -29<sup>th</sup> Dec. 2007.
10. Vinodia A., **Pandit R. K.,** "Model for Land-use Evolution and impact assessment: A Study of Comprehensive Urban Planning Support System" National Seminar on Infrastructure Management for New World Order, Sponsored by AICTE, N. Delhi Organised by Department of Architecture, MITS, Gwalior, 28<sup>th</sup> -29<sup>th</sup> Dec. 2007.
11. Chaurasia D., **Pandit R. K.,** "Rural Re-Construction: An Overview of Infrastructure gestation in Indian Rural Setup" National Seminar on Infrastructure Management for New World Order, Sponsored by AICTE, N. Delhi Organised by Department of Architecture, MITS, Gwalior, 28<sup>th</sup> -29<sup>th</sup> Dec. 2007.
12. Chaurasia D., **Pandit R. K.,** "Decision Support Systems for Sustainable Urban Planning, Development & Management" National Conference on "Emerging Trends In Information Technology", Sponsored by AICTE, N. Delhi Organised by Computer Science Department, Shri G.S. Institute Of Technology And Science Indore (M.P), 18<sup>th</sup> -20<sup>th</sup> Dec. 2007.
13. Anjali S Patil, **Pandit R. K.** "Impact of Peri urban Development and Compact City Models" 56<sup>th</sup> National Conference of Town Planners,Kolkata, organized By IITPI, December 2007.
14. Chaurasia D.,**Pandit R. K.,** "Sustainable Urban Transport Applications: A Need of Present Urban Setup" National Seminar on Renewable Energy: Potential & Sustainable Development, Organised by Department of Architecture & Mechanical Engineering, MITS, Gwalior, 25<sup>th</sup> -26<sup>th</sup> Sept.. 2007.
15. **Pandit.R.K** "Techno Scientific Impact on Human Behaviour and Social System" International Conference on Technology Management (ICTM 2006), Malaysia 4<sup>th</sup> - 5<sup>th</sup> December 2006.
16. Chaurasia.D, **Pandit.R.K** "Global Positioning System advanced Information and Communication System- An application to road transport"AICTE Sponsored National Conference ,MITS,Gwalior 29-30<sup>th</sup> November,2006.
17. Chaurasia.D, **Pandit.R.K** "Urban road transport management through intelligent transport systems"National Seminar on GIS,GPS & RS applications in Transportation Planning and Management St.Peters Engineering College, Chennai ,21<sup>st</sup> -22<sup>nd</sup> November 2006.
18. Chaurasia.D, **Pandit.R.K,** "Pre & post disaster management of urban corridors by applying intelligent urban transport techniques" National Seminar on Technology for Disaster Mitigation. NIT Hamipur, 29-30 Sept. 2006.
19. Chaurasia.D, **Pandit.R.K&Patil A.S.,** "Intelligent Urban Transport Systems For Heterogeneous Environment Conditions" National Seminar on Infrastructure Management for New World Order and Systems. MITS, Gwalior, March 2006.
20. Patil A.S., **Pandit.R.K.&Chaurasia.D,** "Managing the Rural Urban Fringe Growth" National Seminar on Infrastructure Management for New World Order and Systems. MITS, Gwalior, March 2006.
21. **Pandit R.K.** "Theme Paper - Infrastructure Management for New World Order and Systems" National Seminar sponsored by AICTE, New Delhi, MITS, Gwalior March 2006.

22. **Pandit.R.K.** "Quality Through Resource Sustainability in Technical Education." National Seminar ,KonguEngg. College ,Erode,TN,Dec 1999.
23. **Pandit.R.K.&R.N.Munshi.** "Construction Management by Distance Education Method: Scope, Strategies and Programmes" Second Regional Workshop on Construction Management Education and Training in the Asia and Western Pacific Region, Kathmandu, Nepal, Organised By NICMAR and NEC, Nepal, December 1999.
24. **Pandit.R.K.,R.N.Munshi.&R.D.Gupta.**"Total Quality Management of Technical Education" Symposium on Technical Education in India in the Next Millennium our-Preparedness, organised by Rajiv GandhiProudyogikiVishwadalaya-Bhopal, Nov'99
25. **Pandit R.K.** "BOT in Housing Sector", International Conference on High Rise Structures, Coimbatore. TN, Oct 1999.
26. **Pandit.R.K.** "The Technical Education System and The Next Generation". II Asia Pacific Forum on Engineering and Technology Education, Sydney, Australia, July, 1999.
27. **Pandit.R.K.** "Attributes of Sustainable Urban Development." XXVI IAHS World Housing Congress, San Francisco, California, USA, June, 1999.
28. **Pandit.R.K.** "Management of Urban Matrix". XXVI IAHS World Housing Congress, Sanfrancisco, California, USA, June, 1999.
29. **Pandit.R.K.**"Technical Education & the New Millennium" - International Conference Guwhati, Assam - Jan 1999.
30. **Pandit.R.K.**"Urbanization and the Shelter" XXV World Housing Congress, Lisboa Portugal June 1998
31. **Pandit.R.K.,R.N.Munshi.&R.D.Gupta.**"Integrated Technical Education" International Conference Sponsored by D.T.E.(M.P.), Bhopal Jan 1998
32. **Pandit.R.K.&R.N.Munshi.** "Academic Audit- A Management Tool for Quality in Technical Education" International Conference Sponsored by D.T.E.(M.P.), Bhopal Jan 1998.
33. **Pandit.R.K** "Institute Industry Interaction" International Conference Sponsored by D.T.E.(M.P.), Bhopal Jan 1998.
34. **Pandit.R.K.&R.N.Munshi.** "Revamping Technical Education - Basic Features" International Conference Sponsored by D.T.E.(M.P.), Bhopal,Jan 1998
35. **Pandit.R.K.& R.N.Munshi.**"Quality Information Management Transfer System" National Seminar, M A C T Bhopal Dec 1997
36. **Pandit.R.K.& R.N.Munshi.**"Power Planning in Remote areas of Developing Countries" International Conference U.O.R.Roorkee Oct. 1997
37. **Pandit.R.K.&R.N.Munshi.** "Real Estate Management" International Conference , U.O.R.Roorkee, Roorkee Oct 1997
38. **Pandit.R.K.&R.N.Munshi.** "Innovative Construction Organization for 21<sup>st</sup> Century" International Conference , U.O.R.Roorkee, Roorkee Oct 1997
39. **Pandit.R.K.&Y.P.Singh.**"Urbanization"International Conference, U.O.R.Roorkee, Oct 1997
40. **R.N.Munshi.&Pandit.R.K.**"T Q M in Construction" (The Needs & Attributes) National Conference, C.E.P.T Ahmedabad Mar 1997.
41. **Pandit.R.K.&R.N.Munshi.** "Performance Appraisal, A TQM Tool In Technical Education" National Seminar SV.RC of Engineering and Technology Surat Jan 1997
42. **Pandit.R.K.&R.N.Munshi.** "Quality Learning System in Engineering Colleges" National Seminar MACT,Bhopal Dec 1996
43. **Pandit.R.K.&R.N.Munshi.** "Innovative Construction Organization" National Seminar M.I.T.S,Gwalior Jan 1996



44. **Pandit.R.K.&A..Sharma.** “Management of Energy In Buildings” National Seminar MITS, Gwalior Nov 1993.
45. **Pandit.R.K.** “Settlement Planning And Management” National Seminar MACT, Bhopal Mar 1992.
46. **Pandit. R. K.** “Productivity Techniques in Construction” National Seminar M.I.T.S, Gwalior Jan 1991.

**Prof. L.K.Jain**

**I. Design of Energy Efficient Buildings**, Proc. of All India Seminar on Energy conservation by Institution of Engineers( India) , M.P. Chapter, Bhopal, June,1991

- I. **Energy Saving in Existing and New Buildings**, Proc. of National at U.O.R., Roorkee, Dec.1992.
- II. **Energy Management in Built Environment, Theme Paper** , National Seminar on Management of Energy in Buildings at M.I.T.S. Gwalior, Nov.1993 ( Co-author : Dr. R.N.Munshi)
- III. **Thermal Human Response in Built environment**, proc. of National Seminar on Management of Energy in Buildings at M.I.T.S.Gwalior, Nov.1993 ( Co-Author : Dr. R.N.Munshi)
- IV. **System Model for Energy Management in Built Environment** , Proc. of National seminar on Management of Energy in Buildings at M.I.T.S. Gwalior, Nov.1993 ( Co-author : Dr. R. N. Munshi)
- V. **Peoples Participation in Settlement Planning and its Management** , National seminar at M.A.C.T., Bhopal, April 1995( Co-Author: S. S. Jadon)
- VI. **Coordination Among Different Specialized People Achieving through Construction Management** , Proc. on Role of Engineering Institutions and Building Research Institutes in Low Cost Construction at M.I.T.S., Gwalior, Jan.1996( Co-Author: AlokRanjan , and S. K. Jain).
- VII. **Cost effective Management & Improved Construction Technology For Maintaining Quality Control**, Proc. on Role of Engineering Institutionns and Building Research Institutes in Low Cost Construction at M.I.T.S., Gwalior, Jan.1996( Co-Author: AlokRanjan , J.Rath and Sandeep Garg).
- VIII. **Low Cost Housing - Some Basic Issues**, Proc. on Role of Engineering Institutionns and Building Research Institutes in Low Cost Construction at M.I.T.S., Gwalior, Jan.1996( Co-Author: Dr. R.N.Munshi , and S.K.Jain).
- IX. **Economy of Housing**, Proc. on Role of Engineering Institutions and Building Research Institutes in Low Cost Construction at M.I.T.S., Gwalior, Jan.1996 ( Co-Author: Dr. R. N. Munshi , and S. K. Jain and R. K. Goyal).
- X. **Recycling and reuse of Waste as construction Material; A Sustainable approach** published in National journal Research link Vol Vi (07) No.42(A) PP 112-114, Sept 07.
- XI. **Factors affecting design of Energy efficient & climatic responsive building within hot arid zones in India** –Research link Vol VI (07) No 42(A) pp 127-131 Sept 07( Co- author A.K. Vinodiya)
- XII. **Investigating process of urban transformation & dynamics of urban sprawl:**  
A case study of Gwalior City. Published in national Journal JIIA, Vol. 72, No.09. PP25-27 (Co- author A.K. Vinodiya and Alok Sharma)
- XIII. **Nostalgia for Heritage, a Revitalisation of Multiculturalism**– Republished in National Magazine of Architecture, Time space and people (Co- author: Prof. L. K. Jain, Ar. Tarun Jaiswal, Ar Anil Balani)
- XIV. **Earthquakes : The Hammers of GOD An Uncalled Global Catastrophe Shaking the planet** – published in National Journal of JIIA Vol. 71, Issue 01, Jan 2006, (Co- author: Prof. L. K. Jain, Ar. Tarun Jaiswal, Ar Anil Balani)
- XV. **Nostalgia for Heritage, a Revitalisation of Multiculturalism**– published in

National Journal of JIA Vol. 70, Issue 7, August 2005, (Co- author: Prof. L. K. Jain, Ar. Tarun Jaiswal, Ar Anil Balani)

- XVI. **“Seismic Protection of Heritage Buildings”** - Published in International Conference, at Rome (Author:Dr. S. K. Jain, co author -Prof. L. K. Jain)
- XVII. **“Review of Problems in Engineering Education”**, Proc. of National Seminar on Technical Education in Current Perspective (TECP-2007), University College of Engineering, Kota. (L. K. Jain and S. K. Jain)

**Dr. Alok Sharma**

**Water loss and Global Warming issues in cooling tower and chimney..** Published by Radha Publications, DaryaGanj, New Delhi.(Edited by Dr. Sanjeev Jain & Dr. Deep K. Sharma. Year 2015.pages 86-92)

**Dr. S.S. Jadon**

**Papers/ Articles in Journals/ Publications:**

- “Role of landmark as Identity in city image - a case study of Gwalior” in the ITPI Journal, Vol 9 No.2 April-June 2012.
1. “Revitalisation of an historic precinct - case study Gwalior, India” in the book publication, ‘New Architecture and Urbanism : Development of Indian Traditions’, published by INTBAU India, 2007.
  2. “Basic concepts in urban design - a research review” in the ITPI Journal, Vol 4 No.1 Jan-March 2007.
  3. “A divine saga in stone” in the Journal of the Indian Institute of Architects, Vol 70 issue 02 Feb-Mar 2005.
  4. “Historic city and conservation research” in the Journal of the Indian Institute of Architects, Vol 69 issue 09 Sept. 2004.

**Papers at International level meets:**

- 2) “Urban Lakes - searching sustainable solutions. Case study: Datia, India” at the 12th World Lake Conference (Taal2007) at Jaipur, India. (Oct-Nov 2007)
- 3) “Revitalization of an historic precinct” at the INTBAU International Conference - New Architecture and Urbanism: Development of Indian Traditions at New Delhi (Jan2007)
- 4) “Urban renewal of a historic city core” at the International Conference on Built Environment (ICiBE) 2006 at Malaysia.(Jun 2006)
- 5) “Historic city and conservation research” at the 7th International Symposium of the Organization of World Heritage Cities (OWHC) 2003 at Rhodes, Greece.(Sept 2003)
- 6) “Environmental Imperatives for a pilgrimage event - case study Orchha” Joint research paper at the 38th International Conference of the International Society of City and Regional Planners (IsoCarp) (2002)
- 7) Traditional Housing Forms in India at the XXVII IAHS World Housing Congress 1999 at Dept. of Civil Engineering, University of Portland, Oregon, USA (June 1999)
- 8) Role of Culture and Tradition in Housing Parameters at the XXVII IAHS World Housing Congress 1999 at Dept. of Civil Engineering, University of Portland, Oregon, USA (June 1999) (joint paper with R.S. Jadon)
- 9) Revitalization of a historical residential zone at the XXV IAHS World Housing Congress 1998 at Dept. of Civil Engineering, Universidade do Porto, Lisboa, Portugal (June 1998)

- 10) Architectural Conservation in Architectural Education at the UIA-IIA International Meet on Architecture and Heritage at Aurangabad, Maharashtra (Mar. 1998)
- 11) Conservation of Historic towns of India at the UIA-IIA International Meet on Architecture and Heritage at Aurangabad, Maharashtra (Mar. 1998) (joint paper with R.S. Jadon)
- 12) Revitalization of a Civic Square at the ARCASIA Seminar on Urban Renewal at New Delhi (Feb 1998)
- 13) Quality Management for Concrete Structures at the International Conference on Maintenance and durability of concrete structures at JNTU, Hyderabad (March 1997)
- 14) Conceptual Modelling of repair/ rehabilitation management information at the International Conference on Maintenance and durability of concrete structures at JNTU, Hyderabad (March 1997) (Joint paper with Sudhir S. Bhadauria, Dr. M.C. Gupta)

**Papers at National Level meet:**

1. Integration of services in Hospital Planning at the National Seminar on Services in multi-storeyed buildings at CEPT, Ahmedabad (Dec. 1996)
2. Urban Built Environment at the National Conference on New Paradigms in Civil Engineering Practices at AFC, Bhatkal, Karnataka (November 1996)
3. Settlements and Energy Patterns at the National Conference on New Paradigms in Civil Engineering Practices at AFC, Bhatkal, Karnataka (November 1996) ( joint paper with R.S. Jadon)
4. Prediction of residual service life of concrete structures at the National Conference on New Paradigms in Civil Engineering Practices at AFC, Bhatkal, Karnataka (Nov. 1996) (joint paper with Sudhir S. Bhadauria, Dr. M.C. Gupta)
5. Energy conservation through Management at the National Seminar on Management of Energy in Buildings at MITS, Gwalior. ( Nov.1993)
6. Energy Consciousness in Building Design - a perspective at the National Seminar on Management of Energy in Buildings at MITS, Gwalior. ( Nov.1993)
3. People's participation in Settlement Planning and its Management at the National Seminar in Urban Development and management at the Department of Architecture, MACT, Bhopal (Mar. 1992)

**Dr. A.S. Patil**

(A) Details of published work: Research papers in **journals (National)**

1. "Urban Morphological Study of Gwalior" JIIA, Sept 2008,
2. "Planning of Sanitation System in Peri-Urban Slums" ITPI Journal April- June 2008

(B) Details of published work: Research papers in **journals (International)**

1. Socio Economic Development Indicators, A critical appraisal of Gwalior Region, IJAET, Oct- Dec 2010

APPLIED SCIENCE

**Rs. 11.53 Lakh**

**13. Research facility / centre with**

Biotech

- state recognition
- national recognition
- international recognition
- Name of journals/Research labs/Research equipment/Research Incentives/Interdepartmental Research projects

Chemical

**-NIL-**

**MCA : Research Center of RGPV Bhopal**

Elex:

- state recognition
- national recognition – Antenna testing by frequency analyser.
- international recognition-Nil.

**Civil**

- **state recognition**
- **national recognition**
- **international recognition**

QIP Centre for Ph.D.

**CSE/IT**

S.No	Recognition	State/National/International
1.	Quality Improvement Programme for Ph.D	National
2.	RGPV research Center for PhD Programme	National
3.	IBM Center of Excellence	National
4.	Infosys Campus Connect	National

- state recognition
- national recognition
- international recognition
- Name of journals/Research labs/Research equipment/Research Incentives/Interdepartmental Research projects

**APPLIED SCINECE**

**YES**

**ELECTRICAL**

- **State recognition**

Research center of [Rajiv Gandhi Proudyogiki Vishwavidyalaya](#)  
(RGPV), Madhya Pradesh.

- **National recognition**

Minor Research Center under Quality Improvement Program (QIP)  
MHRD New Delhi

- **International recognition**

Nil

**MECHANICAL**

- State recognition : SKF Asset and Reliability Centre
- National recognition : SKF Asset and Reliability Centre
- International recognition : SKF Asset and Reliability Centre
- Name of journals/Research labs/Research equipment/Research Incentives/Interdepartmental Research projects

S.No.	Name of Journals	Publisher
1.	Applied Mechanics Reviews	ASME
2.	Journal of Applied Mechanics	ASME
3.	Journal of Biomechanical Engineering	ASME
4.	Journal of Computational and Nonlinear Dynamics	ASME
5.	Journal of Computing and Information Science in Engineering	ASME
6.	Journal of Dynamic Systems, Measurement, and Control	ASME
7.	Journal of Electronic Packaging	ASME
8.	Journal of Energy Resources Technology	ASME
9.	Journal of Engineering for Gas Turbines and Power	ASME
10.	Journal of Engineering Materials and Technology	ASME
11.	Journal of Fluids Engineering	ASME
12.	Journal of Fuel Cell Science and Technology	ASME
13.	Journal of Heat Transfer	ASME
14.	Journal of Manufacturing Science and Engineering	ASME
15.	Journal of Mechanical Design	ASME
16.	Journal of Medical Devices	ASME
17.	Journal of Offshore Mechanics and Arctic Engineering	ASME
18.	Journal of Pressure Vessel Technology	ASME

19.	Journal of Solar Energy Engineering	ASME
20.	Journal of Tribology	ASME
21.	Journal of Turbomachinery	ASME
22.	Journal of Vibration and Acoustics	ASME
23.	Transportation Research Part C: Emerging Technologies	Scimedirect
24.	Biosystems Engineering	Scimedirect
25.	Composites Part B: Engineering	Scimedirect
26.	Composites Science and Technology	Scimedirect
27.	Control Engineering Practice	Scimedirect
28.	Desalination	Scimedirect
29.	Flow Measurement and Instrumentation	Scimedirect
30.	Geotextiles and Geomembranes	Scimedirect
31.	Information Fusion	Scimedirect
32.	International Journal of Engineering Science	Scimedirect
33.	Journal of Process Control	Scimedirect
34.	Journal of Transportation Systems Engineering and Information Technology	Scimedirect
35.	Nano Today	Scimedirect
36.	Nanomedicine:Nanotechnology, Biology and Med *Online Only*	Scimedirect
37.	Nonlinear Analysis: Hybrid Systems	Scimedirect
38.	Nonlinear Analysis: Real World Applications	Scimedirect
39.	Optik	Scimedirect
40.	Systems & Control Letters	Scimedirect
41.	Tribology International	Scimedirect
42.	Tsinghua Science and Technology	Scimedirect
43.	Wear	Scimedirect
44.	Computers & Chemical Engineering	Scimedirect
45.	Diamond and Related Materials	Scimedirect
46.	Journal of Loss Prevention in the Process Industries	Scimedirect
47.	Applied Ergonomics	Scimedirect
48.	Cement and Concrete Composites	Scimedirect
49.	Cement and Concrete Research	Scimedirect
50.	Cirp Annals - Manufacturing Technology	Scimedirect

51.	Cirp Journal of Manufacturing Science and Technology	Sciencedirect
52.	Computer-Aided Design	Sciencedirect
53.	Computers & Industrial Engineering	Sciencedirect
54.	Computers in Industry	Sciencedirect
55.	International Journal of Human-Computer Studies	Sciencedirect
56.	International Journal of Industrial Ergonomics	Sciencedirect
57.	International Journal of Machine Tools and Manufacture	Sciencedirect
58.	International Journal of Production Economics	Sciencedirect
59.	Journal of Manufacturing Processes	Sciencedirect
60.	Journal of Manufacturing Systems	Sciencedirect
61.	Journal of Materials Processing Technology	Sciencedirect
62.	Journal of Operations Management	Sciencedirect
63.	Precision Engineering	Sciencedirect
64.	World Patent Information	Sciencedirect
65.	ActaMechanicaSolidaSinica	Sciencedirect
66.	Applied Acoustics	Sciencedirect
67.	Applied Thermal Engineering	Sciencedirect
68.	Combustion and Flame	Sciencedirect
69.	Communications in Nonlinear Science and Numerical Simulation	Sciencedirect
70.	Engineering Failure Analysis	Sciencedirect
71.	Engineering Fracture Mechanics	Sciencedirect
72.	European Journal of Mechanics - A/Solids	Sciencedirect
73.	European Journal of Mechanics - B/Fluids	Sciencedirect
74.	Experimental Thermal and Fluid Science	Sciencedirect
75.	International Communications in Heat and Mass Transfer	Sciencedirect
76.	International Journal of Adhesion and Adhesives	Sciencedirect
77.	International Journal of Fatigue	Sciencedirect
78.	International Journal of Heat and Fluid Flow	Sciencedirect
79.	International Journal of Heat and Mass Transfer	Sciencedirect
80.	International Journal of Impact Engineering	Sciencedirect
81.	International Journal of Mechanical Sciences	Sciencedirect
82.	International Journal of Multiphase Flow	Sciencedirect



83.	International Journal of Non-Linear Mechanics	Sciencedirect
84.	International Journal of Plasticity	Sciencedirect
85.	International Journal of Pressure Vessels and Piping	Sciencedirect
86.	International Journal of Refrigeration	Sciencedirect
87.	International Journal of Thermal Sciences	Sciencedirect
88.	Journal of Applied Mathematics and Mechanics	Sciencedirect
89.	Journal of Biomechanics	Sciencedirect
90.	Journal of Fluids and Structures	Sciencedirect
91.	Journal of Non-Newtonian Fluid Mechanics	Sciencedirect
92.	Journal of Terramechanics	Sciencedirect
93.	Journal of the Mechanics and Physics of Solids	Sciencedirect
94.	Mechanical Systems and Signal Processing	Sciencedirect
95.	Mechanics of Materials	Sciencedirect
96.	Mechanics Research Communications	Sciencedirect
97.	Mechanism and Machine Theory	Sciencedirect
98.	Mechatronics	Sciencedirect
99.	NDT & E International	Sciencedirect
100.	Probabilistic Engineering Mechanics	Sciencedirect
101.	Proceedings of the Combustion Institute	Sciencedirect
102.	Progress in Energy and Combustion Science	Sciencedirect
103.	Pump Industry Analyst	Sciencedirect
104.	Sealing Technology	Sciencedirect
105.	Theoretical and Applied Fracture Mechanics	Sciencedirect
106.	World Pumps	Sciencedirect
107.	International Journal of Rock Mechanics and Mining Sciences	Sciencedirect
108.	Rare Metal Materials and Engineering	Sciencedirect
109.	Archives of Civil and Mechanical Engineering	Sciencedirect
110.	Materials & Design	Sciencedirect
111.	Sustainable Cities and Society	Sciencedirect

**14. Publications:**

\* number of papers published in peer reviewed journals (national / international)



- \* Monographs
- \* Chapter(s) in Books
- \* Editing Books
- \* Books with ISBN numbers with details of publishers
- \* number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- \* Citation Index – range / average
- \* SNIP
- \* SJR
- \* Impact factor – range / average
- \* h-index

Biotech

S. No.	Article/Book Chapter	Name of Faculty	Title	Year
1	Research Article	Nidhi Raj Yadav and <b>Sunita Sharma</b>	Toxic effect of organophosphate, pyrethroids and organochlorine pesticides on <i>Spirulina plantensis</i> growth rate	2013
2	Research article	A Singh, VK Jatav, <b>S Sharma</b>	Virtual screening and ADMET analysis for identification of inhibitors against acetylcholinesterase associated with Alzheimer's disease	2014
3.	Research article	Shilpi Gupta, <b>Sunita Sharma</b> and Sweta Gupta	Hexavalent chromium toxicity to cyanobacterium <i>Spirulina platensis</i>	2014
4	Research article	Anandi Kavimandan and <b>Sunita Sharma</b>	Role of <i>Spirulina platensis</i> as an enhancer of probiotic organism in whey.	2015
5	Research article	Arvind Kumar, <b>Sunita Sharma</b> and GauravVerma	Insecticidal and genotoxic potential of <i>Acoruscalamus</i> rhizome extract against <i>Drosophila melanogaster</i> .	2015
6	Research article	RuchiBhadoria and <b>Sunita Sharma</b>	Comparative evaluation of nickel and lead scavenging efficiency by <i>in vivo</i> grown plants using atomic absorption spectrophotometer.	2014
7	Research article	Mayank Agrawal, Vinod K Jatav and <b>Sunita Sharma</b>	Screening of competitive inhibitor of heparin sulphate in Japanese Encephalitis.	2015
8	Research article	Shilpi Gupta, Shilpi Singh and <b>Sunita Sharma</b>	Tolerance against heavy metal toxicity in cyanobacteria: role of antioxidant defense system.	2015
9	Research article	PriyankaSahu and <b>Sunita Sharma</b>	Mercury and Lead Accumulation by <i>Eudriluseugeniae</i> in Soils Amended with Vermicompost Biological Forum	2016
10	Book Chapter	Shrivastava B, Jain K, Kumar	Approaches to Understand	2015

		RR, Prusty S, Kumar S, Chakraborty S, <b>Chaudhary HS</b> , Puniya M and Kuhad RC	and Manipulate Rumen Microbial Function. Rumen Microbiology: From Evolution to Revolution,	
11	Review article	Perveen S, <b>Chaudhary HS</b>	Herbal Compounds-An Alternative for Multi-Drug Resistant <i>Vibrio Cholerae</i> .	2015
12	Review article	Jadon R, Singh V, <b>Chaudhary HS</b>	Update on Bioactive Molecules of Actinomycetes	2014
13	Review article	Pandey S, Jadon R, <b>Chaudhary HS</b>	Xylanase: Recent Update on Commercial Production and Optimization of Factors Affecting Its Yield (A Review)	2015
14	Review article	Paliya BS, Verma S, <b>Chaudhary HS</b>	Major bioactive metabolites of the medicinal mushroom: <i>Ganoderma lucidum</i>	2014
15	Review article	Jain D, <b>Chaudhary HS</b>	Clinical significance of probiotics in human	2014
16	Review article	Soni B, Gupta M, <b>Chaudhary HS</b> , Garg A	Updates on agro based food processing industry in India	2013
17	Review article	<b>Chaudhary HS</b> , Soni B, Shrivastava AR, Shrivastava S	Diversity and Versatility of Actinomycetes and its Role in Antibiotic Production	2013
18	Review article	Pathak S, <b>Chaudhary HS</b>	Perspective of microbial species used in Lignocelluloses bioconversion	2013
19	Research article	Perveen S, <b>Chaudhary HS</b>	<i>In Silico</i> Screening of Antibacterial Compounds from Herbal Sources Against <i>Vibrio cholerae</i>	2015
20	Research article	Yadav S, Verma SK and <b>Chaudhary HS</b>	Isolation and Characterization of Organophosphate Pesticides Degrading Bacteria from Contaminated Agricultural Soil	2015
21	Research article	Singh S, Pandey S, <b>Chaudhary HS</b>	Actinomycetes: tolerance against heavy metals and antibiotics	2014
22	Research article	Garg A, Soni B, Pathak S, <b>Chaudhary HS</b>	Assessment of Antioxidant Activity of Terrestrial Actinomycetes Isolates	2014
23	Research article	Verma S, <b>Chaudhary HS</b> , Singh B, Gopalan N, Singh AK	Isolation and assessment of potential probiotic microorganisms from modified indigenous foods preparation	2014
24	Research article	Paliya BS, <b>Chaudhary HS</b> , Verma S, Prasad S	Optimization of fermentation media composition of <i>ganoderma lucidum</i> for improved production of antioxidant and antimicrobial compounds	2014

25	Research article	Verma S, Paliya BS, Prasad S, <b>Chaudhary HS</b>	Antimicrobial activity of probiotic microorganisms from probioticated carrot juice against selective pathogenic strain	2013
26	Research article	Soni B, Garg A, <b>Chaudhary HS</b>	Assessment of Biosurfactant Producing Actinomycetes Isolates from Shivpuri Region M.P., India	2013
27	Research article	Yadav J, Kumar A, Mahor P, Goel AK, <b>Chaudhary HS</b> , Yadava PK, Yadav H, Kumar P	Distribution of airborne microbes and antibiotic susceptibility pattern of bacteria during Gwalior trade fair, Central India	2013
28	Research article	Gupta A, <b>Chaudhary HS</b> , Shrivastava AR, Singh S, Singh AK, Gopalan N	Screening Of Actinomycetes Isolates As A Source Of Antibiotic From Sheopur, Central India	2013
29	Research article	Shruti Kaushik and <b>Rahul Anand</b>	Genome annotation of the complete genome of Streptococcus mutans LJ23 Serotype K by In-silico approach	2013
30	Research article	Shruti Kaushik and <b>Rahul Anand</b>	Docking Studies of Ecdysone Derivatives on Active Site of Glkycosyltransferase (Rgp E) of Streptococcus mutans LJ23	2013
31	Research article	<b>Rahul Anand</b> , Shubhangi Soni, Sunita Sharma	Phytoremediation of Commonly used Metals (Cu and Zn) from Soil by Calendula officinalis (I)	2015
32	Research article	Diksha Jain, Ravita Ravat and <b>Vinod Kumar Jatav</b>	Phylogenetic analysis of RAS subfamily proteins	2016
33	Research article	Smriti Singh, <b>Vinod Kumar Jatav</b> , Sunita Sharma	Virtual Screening & Molecular Docking of Glycoprotein B Inhibitor as a Treatment of Herpes Simplex Virus 1	2015
34	Research article	Pranjil Kulshrestha, <b>Vinod Kumar Jatav</b> , Sunita Sharma	Screening Of Effective Herbal Compounds for Inhibition of Human Papillomavirus Type 16 E6 Protein	2015
35	Research article	Mayank Agarwal, <b>Vinod Kumar Jatav</b> , Sunita Sharma	Screening of Competitive Inhibitor of Heparan Sulfate In Japanese Encephalitis	2015
36	Research article	Renukesh Verma, <b>Vinod Kumar Jatav</b> , Sunita Sharma	Identification of inhibitors of dengue virus (denv1, denv2 and denv3) ns2b/ ns3 serine protease: A molecular docking and simulation approach	2014
37	Research article	Ankit Singh, <b>Vinod Kumar Jatav</b> , Sunita Sharma	Virtual Screening And ADMET Analysis For	2014

			Identification of Inhibitors Against Acetylcholin Esterase Associated With Alzheimer's Disease	
38	Research article	Renukesh Verma, Mayank Agarwal & <b>Vinod Kumar Jatav</b>	Computer-aided Screening of Therapeutic Ligands against KLF8 Protein (Homo sapiens).	2014
39	Review article	Ankur Thakur, Rajkumar yadav, <b>Vinod Kumar Jatav</b>	Physico-chemical characterization and homology modeling based structure prediction of UN2 Protein from Ehrlichia ewingii	2014
40	Research article	Lovekesh Parasher, Ankit Raje and Samraddhi Tiwari, <b>Vinod Kumar Jatav</b>	Homology Modelling and analysis of structure predictions of KLF8 protein from Homo sapiens	2014
41	Research article	Samraddhi Tiwari, <b>Vinod Kumar Jatav</b>	<i>In-silico</i> Analysis & 3D Structure Prediction of Hemagglutinin Protein of H9N2 Avian Influenza Virus	2013
42	Research article	Bhavana Soni, <b>Vinod Kumar Jatav</b> & Savita Gupta	Estimation of microbial population in some confectionary products	2013

## MECHANICAL

\* Number of papers published in peer reviewed journals (national/international)

Sr. No	Name of Faculty	No of Publication
1	Dr. Manoj Gaur	45
2 *	Dr. Pratesh Jaiswal	44
3	Dr. C.S Malvi	40
4	Dr. Manish Kumar Sagar	22
5	Prof. R.P Kagri	20
6	Dr. Avadesh Kumar Sharma	32
7	Dr. Jyoti Vipal	31
8	Prof. Vedansh Chaturvedi	37
9	Prof. Vaibhav Shivhare	03
10	Prof. Sharad Aggarwal	16
11	Prof. Dinesh Kasdekar	32
12	Dr. Amit Aherwar	29
13	Prof. Akash Sood	09
14	Prof. Amit Soni	02
15	Prof. Hemlata Sahu	03

kash Sood has developed following monographs:

- i. Strength of Materials notes for GATE/IES/PSU appearing candidates.
- ii. Fluid Mechanics notes for GATE/IES/PSU appearing candidates.
- iii. Manufacturing Process notes for GATE/IES/PSU appearing candidates.
- iv. Prepared video/PPT solution of Engineering Graphics and uploaded on YouTube and SlideShare.

\* Chapter(s) in Books

Sr. No	Name of Faculty	Chapter details
1	Dr. Manish K. Sagar	Book chapter is published in "Advances in Management and Technology: Mapping Strengths with Opportunities", McGraw Hill Education (India) Private Limited, ISBN-13:978-93-392-2075-4, New Delhi.
2	Dr. Amit Aherwar	A Review Paper on Rapid Prototyping and Rapid Tooling Techniques for Fabrication of Prosthetic Socket, High Value Manufacturing, PP. 345-353, CRC Press, Taylor & Francis Group London, ISBN: 978-1-138-00137-4.

\* Editing Books:

\* Books with ISBN numbers with details of publishers

S.No.	Name of faculty	Book Name	Publisher Name with ISBN/ISSN no
1	Dr. Manoj Gaur	Solar energy: Problem, solution and experiment	Anamaya Publication, New Delhi. ISBN: 13978-81-88342-64-8
2	Dr. Manoj Gaur	"Optimization of machining parameters of hard porcelain on CNC machine" (2015)	Lap Lambert Academic Publishing House Germany ISBN 978-3-659-77788-2
3	Prof. D. Kasdekar	"Optimization of machining parameters of hard porcelain on CNC machine" (2015)	Lap Lambert Academic Publishing House Germany ISBN 978-3-659-77788-2

\* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\* Citation Index – range / average

\* SNIP

\* SJR

\* Impact factor – range / average

\* h-index

S. No	Name of Faculty	Citation index	SNIP	SJR	Impact factor	h-index
1	Dr. Manoj Gaur	156	-	-	-	2
2	Dr. Pratesh Jayaswal	244	-	-	-	6
3	Dr. C.S Malvi	81	-	-	-	1

4	Dr. Manish Sagar	40	-	-	-	3
5	Prof. R.P. Kori	-	-	-	-	-
6	Dr. Avadesh Sharma	80	-	-	-	3
7	Prof. Vedansh Chaturvedi	148	-	-	-	5
8	Dr. Jyoti Vimal	87	-	-	-	6
9	Prof. Dinesh Kasdekar	6				0
10	Prof. Sharad Aggarwal	6	-	-	-	0
11	Prof. Vaibhav Shivhare	-	-	-	-	-
12	Dr. Amit Aherwar	55	-	-	-	1
13	Prof. Bhupendra Pandey	-	-	-	-	0

Chemical

Sl. No.	Faculty Name	No. of Publications				Books / Monographs / Chapters Published
		Journals		Conferences		
		International	National	International	National	
1.	Dr. S. Prasad	9	10	-	14	-
2.	Prof. S. S. Trivedia	3	2	-	-	-
3.	Prof. Swati Gupta	-	-	-	-	-
4.	Prof. Anish P. Jacob	-	-	-	-	-
6.	Prof. Harendra Rathore (Adhoc)	-	-	-	-	-
7.	Prof. Krishan Kumar Pathak (Adhoc)	-	-	-	-	-

MCA

- Number of papers published in peer reviewed journals (national/international )

40

- Monographs: NIL
- Chapter in Books: 02
- Editing Books 03
- Books with ISBN/ISSN numbers with details of publishers  
:01 (978-3-659-14406-

6)

- Number listed in International Database ( For e.sg. Web of Science, Scopus, Humanities International Complete, Dare Database-International Social sciences Directory,EBSCO host etc.) 18

- Citation Index :
- SNIP
- SJR
- Impact factor-range/average : 7.0
- h-index: 8.0

## Elex

- \* number of papers published in peer reviewed journals (national / international) - **498 journals** .
- \* Monographs -Nil
- \* Chapter(s) in Books – **03**
- \* Editing Books - Nil
- \* Books with ISBN numbers with details of publishers - Nil
- \* number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- \* Citation Index – range / average
- \* SNIP -
- \* SJR -
- \* Impact factor – range / average -
- \* h-index -

Name of faculty	Designation	Citation Index	h-index	Impact factor – range / average
Dr. Sarita Singh Bhadauria	Professor & Head,	692	13	
Dr. P.K. Singhal	Professor	610	11	
Dr. Bimal	Associate	192	08	

Garg	Professor			
Dr. Rekha Gupta	Associate Professor	169	06	
Dr. Vandana Vikas Thakre	Associate Professor	112	06	
Dr. Laxmi Shrivastava	Assistant Professor	234	09	
Dr. R.P. Narwaria	Assistant Professor	36	03	
Dr. Karuna Markam	Assistant Professor	04	01	
Prof. Madhav Singh	Assistant Professor	10	01	
Prof. Deep Kishore Parsediya	Assistant Professor	12	02	
Prof. Pooja Sahoo	Assistant Professor	00	00	
Prof. Deepa Sharma	Assistant Professor	00	00	
Prof. Abhilasha Sharma	Assistant Professor	00	00	



Prof. Ranbeer singh tyagi	Assistant Professor	15	02	
Prof. Prashant kumar	Assistant Professor	00	00	
Prof. Neha gupta	Assistant Professor	00	00	

## Civil

**\* number of papers published in peer reviewed journals (national / international) - 83 ( List is given below )**

**\* Chapter(s) in Books by Dr. S.K. Jain**

1. Chapter in **Shock and Vibration Handbook** published by CRC Press, USA [Co-authors: Prof. H. Iemura and Dr. M.H. Pradono], year 2005
2. Chapter on **Earthquake Disaster Waste Management** in book on DISASTER MANAGEMENT IN INDIA: PERSPECTIVE, ISSUES AND STRATEGIES published by New Royal Book Company, Lucknow, year 2007.
3. Chapter in **Vibration Monitoring, Testing, and Instrumentation** published by CRC Press, USA [Co-authors: Prof. H. Iemura and Dr. M.H. Pradono], year 2007

**\* Editing Books**

Technical book in Hindi in 2010 by Prof. A.K. Saxena

Author of three text books for Diploma & degree student by  
Prof. A.K. Saxena

**\* Books with ISBN numbers with details of publishers**

**\* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

**As per the given below**

**\* Citation Index – range / average ---- 0 – 40**

**\* Impact factor – range / average – 3.16- 6.39**

**\* h-index - 0 – 25**

1. Apelsha Kanojia & **S.K. Jain** “ Performance of Coconut shell as coarse aggregate in concrete by Journal Construction and Building materials, Vol. 140, p.p. 150-156, publisher: ELSEVIER, March 2017
2. Kosarwal, M. and Jain, S.K. , Method for Dynamic Characteristics Estimation of Bridge: overview , International Journal of Science and Research Volume: 06, issue: 01, p.p. 1715-1721, January- 2017
3. Vivek Singh Bhadauria & **M. K. Trivedi**, “ Weight Reduction and Strengthening of R C Beam Using CFRP & GFRP Layers by ANSYS 15.0”, International Journal for Research in Applied Science and Engineering Technology, Impact factor- 5.969 (IJRASET), ISSN: 2321-9653; Vol. 5, issue IV, April 2017, p.p. 1700-1705
4. Bhanu Pratap Singh Sikarwar & **M. K. Trivedi**, “ Stabilization of Clayey Soil by Using Gypsum ISSN: 2321-0613; Vol. 5, issue 03, 2017, p.p. 886-888.”, International Journal for Scientific Research & Development, Impact factor- 4.396 (IJSRD),
5. Bhanu Pratap Singh Sikarwar & **M. K. Trivedi**, “ Stabilization of Clayey Soil by Using Gypsum and Calcium Chloride”, International Journal for Research in Applied Science and Engineering Technology, Impact factor- 5.969 (IJRASET), ISSN: 2321-9653; Vol. 5, issue V, May 2017, p.p. 477-481.

6. Neha Pundir & **M. K. Trivedi**, “Improvement of Pavement Soil Sub grade by Using Burnt Brick Dust & Scrap Tyre Rubber”, *International Journal for Scientific Research & Development*, Impact factor- 4.396 (IJSRD), ISSN: 2321-0613; Vol. 5, issue 03, 2017, p.p. 858-860.
7. Neha Pundir & **M. K. Trivedi**, “Improvement of Pavement Soil Sub grade by Using Burnt Brick Dust ”, *International Journal for Research in Applied Science and Engineering Technology*, Impact factor- 5.969 (IJRASET), ISSN: 2321-9653; Vol. 5, issue V, May 2017, p.p. 218
8. **D. Rastogi**, Bharat Bairagi “Treatment of Dairy Wastewater by Physiochemical Method ”, *International Journal of Science and Research (IJSR)*, Vol.6, Issue 4, April 2017.
9. **A. Tiwari**, A.Singh, “Effect of Zinc Oxide Nanoparticle on Compressive Strength and Durability of Cement Mortar”, *International Journal for Research in Applied Science & Engineering Technology*,(e-ISSN:2321-9653), Vol.5 Issue VII,July-2017
10. Tarun Jain, Prof. Archana Tiwari."*Light Weight Bricks Using Waste EPS Beads*", Volume 5, Issue VI, *International Journal for Research in Applied Science and Engineering Technology (IJRASET)* Page No: , ISSN : 2321-9653, [www.ijraset.com](http://www.ijraset.com) , June 2017
11. Vijayendra Singh Dangi, Prof. Aditya Kumar Agarwal, , , ."Current Practices of Solid Waste Management in MITS Campus, Gwalior: A Case Study", Volume 5, Issue V, *International Journal for Research in Applied Science and Engineering Technology (IJRASET)* Page No: , ISSN : 2321-9653, [www.ijraset.com](http://www.ijraset.com), May 2017
12. Riya Govil, Aditya Kumar Agarwal, , , ."Performance Evaluation of Effluent Treatment Plant of Dairy Industry in Gwalior (M.P.)", Volume 5, Issue VI, *International Journal for Research in Applied Science and Engineering Technology (IJRASET)* Page No: , ISSN : 2321-9653,[www.ijraset.com](http://www.ijraset.com), June 2017

13. D. Rastogi & Sourabh Pathak , “ Case study of Cracks in Public Buildings and their Remedies ‘’, International Journal of Science & Research, (e- ISSN: 2319-7064 ), Vol. 6, issue – 5, May 2017
14. D. Rastogi & Bharat Bairagi , “Treatment of Dairy Wastewater by physiochemical method, International Journal of Science & Research, (e- ISSN: 2319-7064 ), Vol. 6, issue – 4, April 2017
15. D. Rastogi & Upendra , “Performance Evaluation of Effluent Treatment Plant of SRF Limnited, Malnpur Bhind (M).P.), International Journal for Research in Applied Science & Engineering Technology , (e- ISSN: 2321-9653 ), Vol. 5, issue – 4, April 2017
16. D. Rastogi & M.A. Khan , “Performance Evaluation of Water Treatment plant at Motijheel, Gwalior International Journal for Research in Applied Science & Engineering Technology , (e- ISSN: 2321-9653 ), Vol. 5, issue – 6, June 2017
17. Gaurav Shrivastava, **A. Tiwari**, “Investigation of Properties of Fresh and Hardened Concrete Containing Waste Glass Powder as Partial Replacement of Cement ”, *International Journal of Science and Research (IJSR)*, Vol.5, 7<sup>th</sup> July, 2016
18. Jitender, **A. Tiwari**, “Influence of Waste Glass Power on Properties of Concrete”, *International Journal of Advances in Science & Technology*, Vol.11, issue 22, may, 2016
19. S. Mishra, **A. Tiwari**, “Effect on Compressive Strength of Concrete by Partial Replacement of Cement with Nano Titanium Dioxide and Nano Calcium Carbonate”, *International Journal of Civil Engineering and Environmental Technology*,(e- ISSN:2349-879X, p-ISSN:2349-8404), Vol.3, No.5, pp. 426-429, april- june, 2016
20. Vipul Mudgal , **A. Tiwari**, “Experimental Investigation of Properties of Fresh and Hardened Concrete Containing Waste Plastic ”, ”, *International Journal of Science and Research (IJSR) ISSN Online : 2319-7064* Vol.5, Issue 8, August 2016
21. Akash Gupta , **A. Tiwari**, “Effect on Mechanical Properties of Paver Block consist Crusher Stone Dust as Fine Aggregate with Inclusion on Steel Fiber ”, *International Journal for Research in Applied Science & Engineering Technology (IJRASET)* Vol.4, Issue X, PP 529-535. October 2016
22. Deepti Singh , **R Kansal**, “Experimental Study of Usage of Discarded Engine Oil as an Admixture in Concrete ”, *International Research Journal of Engineering and*

Technology (IRJET), Vol.3, issue: 06., June 2016

- 23 Deepti Singh , **R Kansal**, “Analysis of Fresh and Hardened Properties of M35 Concrete Mix Using Burned Engine Oil as an Admixture ”, *International Journal of Science Technology & Engineering (IJSTE)*, , Vol.3, issue: 01 Page no from: 459-564., July 2016
- 24 Raghvendra Jadon, **R Kansal**, “Experimental Study of Bituminous Concrete Mix by using Waste Plastic”, *International Journal of Science Technology & Engineering (IJSTE)*, , Vol.3, issue: 01 Page no from: 482-487., July 2016
- 25 Krati Gahoi, **R Kansal**, “Effect of Waste Glass Powder on Properties on Concrete: A Literature Review”, *International Journal of Science and Research (IJSR)* , Vol.5, issue: 08, Page no from: 1329 to 1333. August 2016.
- 26 Krati Gahoi, **R Kansal**, “Waste Glass Powder As a Partial Replacement of PPC”, *International Journal of Advanced and innovative Research*, Vol.5, issue: 08, Page no from: 1414 to 1418. August 2016
- 27 Manish Dubey , **A.K. Saxena** “Assessment of Water Quality Index of Saank River, Morena, Madhya Pradesh ”, *International Journal of Science, Engineering and Technology Research (IJSETR)*, Vol.5, issue: 08., 2563-2567 August 2016
- 28 Manish Dubey , **A.K. Saxena** “Quality Characterization of Groundwater using Water Quality Index in Gwalior City, Madhya Pradesh, India ”, *International Journal of Science, Engineering and Technology Research (IJSETR)*, Vol.5, issue: 08., 2578-2584 August 2016
- 29 Praveen Shivhare , **Prof. Deepak Rastogi**, “ Environmental Impact Assessment due to Festivals, 4<sup>th</sup> International Journal of Engineering Technology Science and Research (IJETSRS) , ISSN 2394-3386, Volume 3, Issue on 5<sup>th</sup> May 2016.
- 30 Rajeev Pandey, **Prof. Deepak Rastogi**, “Impact of Carrosion of Reinforcement in Precast Concrete Construction”, *International Research Journal of Engineering and Technology (IRJET)* Volume-3 issue 8<sup>th</sup> August 2016
- 31 Shyamveer singh chauhan, **Prof. Deepak Rastogi**, “ Utilization of Municipal Solid Waste of Gwalior City for Energy Generation (A Case Study ) , *International Research Journal of Engineering and Technology (IRJET)* , Volume 3, Issue 7 , July 2016
- 32 Vishakha Yadav, **Dr. M.K. Trivedi**, “ Study of Stabilized Soil Bricks and its Compressive Strength , *International Journal of Information Technology and Management* Volume 10, Issue 15, May 2016
- 33 Pankaj Daipuria , **Dr. M.K. Trivedi**, “ Improvement of Swelling properties of Expansive soil Blending with sand and Cement, ”, *International Journal of Science,*

Engineering and Technology Research (IJSETR), Vol.5, issue: 06., ISSN: 2278-7798,  
June 2016

- 34 Shivangi Bharadwaj, **Dr. M.K. Trivedi**, “ Impact of Micro Silica Fume on Engineering Properties of Expansive Soil , International Journal of Science Technology & Engineering Volume 2, Issue 12, June 2016
- 35 Jitendra Singh, **Prof. Sanjay Tiwari, Prof. Gautam Bhadoriya**, “Discrete Time Cost Trade-Off for Multi Mode Problems in CPM” Journal of Civil and Construction Engineering Volume 2 Issue 2, Page 1-9 MAT Journals 2016
- 36 Jitendra Singh, **Prof. Sanjay Tiwari, Prof. Gautam Bhadoriya**, “Time Cost Trade-Off Analysis using IP Formulations ” Journal of Civil and Construction Engineering Volume 2 Issue 2, Page 1-8 MAT Journals 2016.
- 37 Shyamveer singh chauhan, **Prof. Deepak Rastogi**, “ A Multi- Criteria based Analysis of Options for Energy Recovery from Municipal Solid Waste in Gwalior, India , organised by Converse Infor and Gwalior Institute of Information technology (GIIT) Gwalior , 4<sup>th</sup> International Conference on Innovation Research in Engineering Science and Management (ICIRESM – 16) , on 8<sup>th</sup> May 2016.
- 38 Shivam Dixit, **Prof. Deepak Rastogi**, “ Underground Automated vacuum Waste Collection System for Gwalior City (A Case Study), organised by Converse Infor and Gwalior Institute of Information technology (GIIT) Gwalior , 4<sup>th</sup> International Conference on Innovation Research in Engineering Science and Management (ICIRESM – 16) , on 8<sup>th</sup> May 2016.
- 39 Jitendera Sahu , **Prof. Deepak Rastogi**, “ Study of Bituminous Concrete Mixes with Poly. Waste material , 4<sup>th</sup> International Conference on Innovation Research in Engineering Science and Management (ICIRESM – 16) , on 8<sup>th</sup> May 2016.
- 40 *Abhishek Raj Singh & Sanjay Tiwari*, “EPC: An Innovative Tool for Mega Project Construction”, *International Journal in IT and Engineering*, Impact Factor- 4.747

(IJITE), ISSN 2321-1776 ; Vol.3, issue-07; July- 2015, p.p. 21-28.

- 41 Abhishek Raj Singh & **Sanjay Tiwari**, “EPC & EPCM: The Misunderstood Construction Contracts”, Journal of Civil Engineering and Environmental Technology, ISSN 2349-8404; (Online) ISSN: 2349-879X; (Print) Vol.2, No.13; July-Sept. 2015, p.p. 51-55.
- 42 Ankesh Birtharia & **S.K. Jain**, “Application of Ambient Vibration Testing :An Overview,” International Journal of Engineering Research & Technology (IJERT), e-ISSN 2395-0056 ; p-ISSN 2395-0072 Vol.2, issue 4;July. 2015, p.p.969-976
- 43 Ankesh Birtharia & **Sarvesh Kumar Jain**, “Seismic Response of Elevated Water Tanks: An Overview,” International Journal of Engineering Research & Technology (IJERT), e-ISSN 2395-0056 ; p-ISSN 2395-0072 Vol.2, issue 4;July. 2015, p.p.969-976
- 44 Apeksha Kanojia & **S.K. Jain**, “Concrete with Alternative Aggregates” Journal of Civil and Construction Engineering , Vol.1, issue-2; 2015, p.p1-12
- 45 Apeksha Kanojia & **S.K. Jain**, “Performance of Coconut Shell as Coarse Aggregate in Concrete : A Review,” International Journal of Engineering Research & Technology (IJERT), e-ISSN 2395-0056 ; p-ISSN 2395-0072 Vol.2, issue 4; July 2015, p.p. 1096-1100
- 46 Archana Khare & **A. Tiwari** , “ Experimental Investigation on Flexural Behaviour of Concrete Beam by Using Agricultural and Industrial Waste Material”, International Journal of Science and Research (IJSR), ISSN(Online):2319-7064 ; Vol.4, issue 7; July, 2015 , p.p. 1242-1244.
- 47 Archana Khare & **A. Tiwari** , “Investigation of Strength of Concrete Containing Locally Available Industrial and Agricultural Waste”, International Journal of Science and Research (IJSR), ISSN(Online):2319-7064 ; Vol.4, issue 5; May, 2015 , p.p. 3102-3104.
- 48 Chandra Prakash Bastani & **R. Kansal**, “Blended Sand – A Cost Effective Material”, International Journal of Engineering Technical Research (IJETR), ISSN 2321-0869; Nov. 2014, p.p. 12-14.
- 49 Chandra Prakash Bastani & **R. Kansal**, “Effect of Fine Aggregate Particles on Compressive Strength of Cement Mortar”, International Journal of Engineering Studies and Technical Approach (IJESTA), ISSN 2395-0900; Vol.1, No. 7; July 2015, p.p. 8-12.
- 50 **D. Rastogi** & R. Bisaria, “Coagulation studies on Wastewater from Vanaspati manufacturing plant”, Proceedings of National seminar on soil degradation and water pollution caused due to hazardous waste of industries in Bhopal sponsored by EPCO



Bhopal, Nov. 7, 2015.

- 51 **D. Rastogi** & S. Dixit, “Determination of optimum binder content with polymer modified bitumen in B.C.”, IJERT, Vol.3, Issue 2, Feb. 2014.
- 52 Dwarika Puri & **Sanjay Tiwari** , “Efficient Contractor Selection and Bid Evaluation methods for construction industry in India”, International Journal of Science & Research(IJSR) , ISSN(Online):2319-7064, Vol.4, issue 8; August 2015 , p.p. 1027-1035.
- 53 Dwarika Puri & **Sanjay Tiwari**, “Evaluating the Criteria for Contractors’ Selection and Bid Evaluation”, International Journal of Science Invention , ISSN (Online)2319-6734 ; ISSN(Print) 2319-6726 Vol.3, issue-07; July- 2014, p.p. 44-48
- 54 Kuldeep Kushwah & **Sanjay Tiwari**, “Algorithm for CPM Computations with Single Mode Activities” International Journal of Science & Research(IJSR), ISSN(Online):2319-7064 Vol.4, issue-8;August 2015, p.p. 44-48
- 55 Kuldeep Kushwah & **Sanjay Tiwari**, “All Path Algorithm for CPM Networks” International Journal of Science & Research(IJSR) , ISSN(Online):2319-7064 Vol.4, issue-8;August 2015, p.p. 876-878
- 56 L.M. Sharma & **Sanjay Tiwari**, “India A Growing Economy: Challenges for Infrastructure Development”, International Journal of Advances Technology in Engineering and Science , ISSN 2348-7550 ; (Online) Vol.2, issue 6; June 2014, p.p. 193-198.
- 57 L.M. Sharma & **Sanjay Tiwari**, “Resource Constraint: A Major Impediment for infrastructure Growth”, International Journal of Advances Technology in Engineering and Science, ISSN 2348-7550 ; (Online) Vol.2, issue 6; June 2014, p.p. 199-205.
- 58 Manish Kumar Sharma & **R. Kansal**, “Quality – Cost Trade Off (QCT) Based Bidding Strategy”, Recent Trends in Civil Engineering & Technology (RTCET), ISSN 2249-8753 (Online): ISSN: 2321-6476; (Print) ; Vol.5, issue 1; 2015, p.p. 1-5.
- 59 Manish Kumar Sharma & **R. Kansal**, “Quality – Cost Trade Off (QCT) For Contractor Selection”, International Journal of Research in Engineering Technology (IJRET), eISSN 2319-1163 | pISSN:2321-7308 ; Vol.4, issue 4; April 2015, p.p. 311-314
- 60 Manoj Katiyar & **A. Tiwari**, “Sustainable Concrete Production Through Use of Marble Waste Powder and Silica Fume”, Journal of Construction and Building Materials Engineering, Vol.1, issue 1; 2015, p.p. 1-8.
- 61 Manoj Katiyar & **A. Tiwari**, “Variation in Compressive Strength of Concrete by Partial Replacement of Cement with Marble Powder, Silca Fumes and Lime Stone Powder , “International Journal of Advances in Engineering & Scientific Research” (ARSEAM), ISSN 2349-3607 ; (Online) ISSN: 2349-4824; (Print) Vol.2, issue 5; May 2015, p.p. 6-13.
- 62 P.S. Jatav & **D. Rastogi**, “Energy Saving in buildings using green building construction techniques”, International Research Journal of Management Sociology & Humanity



- (IRJMSH), ISSN 2277-9809 (Online) 2348-9359 (Print) Vol.5, Issue , 8, 2014, p.p. 342-351.
- 63 P.S. Jatav, **D. Rastogi & M.K. Trivedi** “Energy Saving in buildings using energy efficient green building material ”, International Research Journal of Management Science & Technology (IRJMST), ISSN 2250-1959 (Online) 2348-9367 (Print) Vol.5, Issue , 11, 2014, p.p. 53-70.
- 64 Prashant Kumar & **A. Tiwari**, “Precast Concrete Construction A Step towards Sustainable Developments”, Journal of Construction and Building Materials Engineering, Vol.1, issue 1; 2015, p.p. 1-9.
- 65 Prashant Kumar & **A. Tiwari**, “Precast Construction in India-Opinion of Construction Professionals”, Journal of Construction and Building Materials Engineering, Vol.1, issue 2; 2015, p.p. 1-9.
- 66 Prakash Dwivedi & **A. Tiwari**, “Properties of Fresh and Harden Concrete made by using Waste Concrete Aggregate , “International Journal of Engineering Research & Technology ” (IJERT), ISSN 2278-0181 ; Vol.3, issue 4; April 2014, p.p. 831-834.
- 67 Prakash Dwivedi & **A. Tiwari**, “Characteristics of Concrete Made with Partial Replacement of Natural Aggregates by Aggregate Recovered from Waste Concrete, “International Journal of Engineering Research & Technology ” (IJERT), ISSN 2278-0181 ; Vol.3, issue 9; Sept. 2014, p.p. 522-525.
- 68 Pranjul Rajput & **Sanjay Tiwari** ,“A Review of Total Cost Trade-off in Construction Projects”, Journals of Construction and Building Materials Engineering, 2015 , Vol.1, issue 2; 2015, p.p. 1-13.
- 69 Pranjul Rajput & **Sanjay Tiwari** , “Time Cost –Trade –off using Linear Programming Approach ” , Journals of Construction and Building Materials Engineering, 2015 , Vol.1, issue 2; 2015 , p.p. 1-9.
- 70 Rakesh Gir , **D. Rastogi & Sanjay Tiwari**, “Through Managing Municipal Waste Public-Private Partnership in Gwalior, MP (A case Study), “International Journal of Research in Engineering and Technology” (IJRET), eISSN 2319-1163 pISSN:2321-7308 ; Vol.3, issue 2; Feb. 2014 , p.p. 117-121.
- 71 Rakesh Gir , **D. Rastogi**, “Implementation of Municipal Solid Waste (Management and Handling) Rules 2000: A Review of Gwalior City, “International Journal of Engineering Studies” ISSN 0975-6469 Vol.6, No.1; 2014, p.p. 19-28.
- 72 S. Saxena & **R. Kansal**, “Cost Escalation, Schedule Overruns & Quality shortfalls on Construction Projects”, Recent Trends in Civil Engineering & Technology (STM Journals), ISSN:2249-8753(online), Vol. 5, Issue 3, 2015, p.p. 1-6.

- 73 Sapan Namdev & **M.K. Trivedi**, “Use of Optimization techniques in time-cost trade off (TCT) in civil construction: An Overview”, International Journal Civil Engineering and Mechanics, Vol.2, No.1, 2015, p.p. 1-13.
- 74 Sapan Namdev, **M.K. Trivedi & R.Kansal**, “Multi-Objective Time-Cost Optimization of Civil Construction Project by Genetic Algorithm (GA), “International Journal of Civil Engineering Research” ISSN 2278-3652 Vol.6, No.1, 2015, p.p. 45-51.
- 75 Sparsh Johari & **Sanjay Tiwari**, Use of Efficient Tools for Tying Rebar on Indian Construction sites”, Journal of Civil Engineering and Environmental Technology, ISSN: 2349-879X; (Print) Vol.2, No. 6; 2014.
- 76 Sparash Johari & **Sanjay Tiwari**, “Establishment of Training Centre at Construction Site under Recognition of Prior Learning (R.P.L.) Process for Skill Development of a Workman”, Journal of Civil Engineering and Environmental Technology, ISSN 2349-8404; (Online) ISSN: 2349-879X; (Print) Vol.2, No. 13; July-Sept. 2015, p.p. 26-30.
- 77 Shikha Mittal & **S.K. Jain**, Review on Time Cost Optimization using various Tools and Techniques”, International Research Journal of Management Science & Technology (IRJMST), ISSN 2249-8409; (Online) ISSN: 2349-879X; 2348-9367 (Print) Vol.2, No. 13; July-Sept. 2015, p.p. 23-25.
- 78 Shikha Mittal, **S.K. Jain & Sanjay Tiwari**, Optimization of Time and Cost of a Construction Project using MS-Excel”, Journal of Civil Engineering and Environmental Technology, ISSN 2349-8404 ; (Online) ISSN: 2349-879X; (Print) Vol.2, No. 13; July-Sept. 2015, p.p. 31-34.
- 79 Sudhir Shrivastava & **R. Kansal**, “Impact of Change Orders on Construction Project Performance”, Recent Trends in Civil Engineering & Technology (STM Journals), ISSN:2249-8753(online), Vol. 5, Issue 3, 2015, p.p. 9-14.
- 80 Sudhir Shrivastava, Subhash Saxena & **R. Kansal**, “Change Order Management in Construction Projects: A Review”, Recent Trends in Civil Engineering & Technology (STM Journals), ISSN:2249-8753(online), Vol. 5, Issue 3, 2015, p.p. 41-45.
- 81 Vaishant Gupta & **R. Kansal** ,“ Improvement of Construction Labour Productivity in Chambal Region, “International Journal of Research in Engineering and Technology” (IJRET), eISSN 2319-1163 pISSN:2321-7308 ; Vol.3, issue 10; Oct. 2014 , p.p. 34-37.
- 82 Wajid Hussain, **M.K.Trivedi & R.Kansal**, “Optimization of Construction Resource Allocation and Levelling Using Genetic Algorithm”, International Journal of Research in Science , Engineering and Technology, ISSN(Online):2319-8753 ; ISSN(Print) 2347-6710 Vol.4, issue 6; June, 2015 , p.p. 4573-4578.
- 83 Wajid Hussain, **M.K.Trivedi & Dr. R.Kansal**, “Application of Genetic Algorithm in Resource Levelling and Allocation”, Recent Trends in Civil Engineering and Technology(RTCET), ISSN(Online):2249-8753 ; ISSN(Print) 2321-6476 Vol.5, issue

6;2015 , p.p. 1-8.

CSE/IT

- \* number of papers published in peer reviewed journals (national / international)
- \* Monographs
- \* Chapter(s) in Books
- \* Editing Books
- \* Books with ISBN numbers with details of publishers
- \* number listed in International Database (For *e.g.* Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
- \* Citation Index – range / average
- \* SNIP
- \* SJR
- \* Impact factor – range / average
- \* h-index

#### Publication Details

Name	Total No. of publication in national/International Journal	No. of Book Chapters	No. of Monographs	No. of Books published/Editing	H-Index	Total Citation
Dr. R.K Gupta	51	01	NIL	NIL	-	-
Prof. Manish Dixit	70	01		nil	6	114
Dr. Akhilesh Tiwari	72	05	Nil	01 ongoing	5	112
Prof.Khushboo Agarwal	04	NIL	NIL	NIL	1	
Prof.Punit Kumar Johari	19	01	NIL	nil	3	29
Dr. Sanjeev Sharma	54	01	Nil	01 ongoing	3	39
Prof.Jaimala Jha	18	nil	nil	nil	1	4
Prof.Vikas sejwar	19	NIL	NIL	NIL	2	29
Prof. Abhilash sonkar	9	NIL	NIL	NIL	1	-
Prof. Rajeev Kumar Singh	30	02	Nil	01 ongoing	4	70
Prof. Neha	18	NIL	NIL	NIL	1	12

Baradwaj						
Prof. Jamvamt Singh Kumare	8	NIL	Nil	Nil	1	4
Prof. Mahesh Parmar	10	01	NIL	NIL	1	4
Prof. R.R. Singh	09	Nil	Nil	Nil	3	20
Prof. Amit kumar Manjhwari	17	NIL	NIL	NIL	1	3
Prof. Vishakha Agarwal	2	1	NIL	NIL	NIL	NIL
Prof. Nishtha Parashar	1	NIL	NIL	NIL	NIL	NIL
Prof. Pooja Mishra	3	1	NIL	NIL	NIL	NIL
Prof. Abhishek Dixit	1	NIL	NIL	NIL	NIL	NIL
Prof. Namrata Agrawal	NIL	NIL	NIL	NIL	NIL	NIL
Prof. Reenu Rajpoot	NIL	NIL	NIL	NIL	NIL	NIL
Prof. Pallavi Gupta	3	NIL	NIL	NIL	NIL	NIL
Prof. Somya Agarwal	1	NIL	NIL	NIL	NIL	NIL
Prof. Sanjay Tehrita	NIL	NIL	NIL	NIL	NIL	NIL

Name	No of Paper listed in Web of science	No of Paper listed in Scopus	No of Paper listed in Humanities international complete	No of Paper listed in Dare Database	No of Paper listed in EBSCO	Name of other database
Prof. R.K. Gupta	-	9	-	-	-	-

Prof. Manish Dixit		8	-	-	-	-
Dr. Akhilesh Tiwari	-	12	-	-	-	-
Prof.Khushboo Agarwal	-	-	-	-	-	-
Prof.Punit Kumar Johari	-				5	
Dr. Sanjeev Sharma	-	4	-	-	-	-
Prof.Jaimala Jha		nil	-			
Prof.Vikas sejwar	--	--	--	--	--	--
Prof. Abhilash sonkar	-	-	-	-	-	-
Prof. Rajeev Kumar Singh	-	4	-	-	-	-
Prof. Neha Baradwaj	--	--	--	--	--	--
Prof.Jamvamt Singh Kumare	-	-	-	-	-	-
Prof. Mahesh Parmar	-	-	-	-	-	-
Prof. R.R. Singh	-	1	-	-	3	-
Prof. Amit kumar Manjhwari	-	-	-	-	-	-

S. No.	Name	Publication in Journals Last 05 years)	Publication in conferences ( Last 05 years)	Publication (Journals & conferences) till date		Total Publicatio n  (Journals & conference s)
				Journals	Conferences	
1.	Dr. Laxmi Srivastava	30	38	89	150	239
2.	Dr. Manjaree Pandit	28	35	64	108	172
3.	Dr. Arun Kumar Wadhwani	28	43	71	86	157
4.	Prof. Ashish Patra	09	10	30	30	60
5.	Dr. Sulochana Wadhwani	34	27	59	96	155
6.	Prof. Hari Mohan Dubey	23	17	28	32	60
7.	Dr. Shishir Dixit	174	10	19	21	40
8.	Prof. Rakesh Narvey	18	08	20	12	32
9.	Prof. Himmat Singh	09	22	18	18	31
10.	Dr. Vijay Bhuria	04	05	26	11	37
11.	Prof. Kuldeep Kumar Swarnkar	20	06	25	12	37
12.	Prof. Praveen Bansal	02	12	20	12	32
13.	Prof. Vishal Chaudhary	01	05	02	05	07

14.	Prof. Vijay Kumar Tewari	01	05	01	05	06
15.	Mr. Raj Kumar Bansal	-	01		01	01
16.	Mr. Shubham Gupta	01	03	01	03	04
17.	Mr. Shubhu Saurabh	.	01	-	01	01

**Chapters in Books:**

<b>Article/Book/Book Chapter</b>	<b>Name of Author(s) in the format ,Last Name, First name, Middle name</b>	<b>Full title of the article /chapter/book</b>	<b>Year of Publication</b>
Book Chapter	Kirti Paul , Manjaree Pandit , Laxmi Srivastava	Market Power Assessment Using Hybrid Fuzzy Neural Network, Innovation in Intelligent Machine-3 Studies in Computational Intelligence Volume 442	2013
Book Chapter	Hari Mohan Dubey, B.K. Panigrahi, Manjaree Pandit,	“Improved Flower Pollination Algorithm for Short Term Hydrothermal Scheduling” Book Title: Swarm, Evolutionary, and Memetic Computing, Chapter No: 62 Lecture Notes on computer science 8947, Springer 2015 pp. 1–17, .DOI: 10.1007/978-3-319-20294-5_62	2015
Book Chapter	Hari Mohan Dubey, B.K. Panigrahi, Manjaree Pandit, Mugdha Udgir, Gbest	[Chap-3], Guided Gravitational Search Algorithm for Economic Load Dispatch Book Title: Swarm, Evolutionary, and Memetic Computing, Chapter No: 61 Lecture Notes on computer science 8947, Springer 2015 LNCS 8947, pp. 1–15, 2015. DOI: 10.1007/978-3-319-20294-5_61	2015

Book Chapter	Hari Mohan Dubey, Manjaree Pandit, and B.K. Panigrahi,	[Chp_2] “Cuckoo search algorithm for short term hydrothermal scheduling” Book Title: Power Electronics and Renewable Energy Systems, Chapter No: 57 ,pp.573-589. Lecture Notes of Electrical Engineering 326, Springer _ 2015, DOI 10.1007/978-81-322-2119-7_57	2015
Book Chapter	Hari Mohan Dubey, Manjaree Pandit, B.K. Panigrahi, and Mugdha Udgir	[Chp_1], “A Novel Swarm Intelligence Based Gravitational Search Algorithm For Combined Economic and Emission Dispatch Problems” Book Title: Swarm, Evolutionary, and Memetic Computing, Lecture Notes on computer science 8297Part I, Springer _ 2013, pp. 568–579	2015
Book Chapter	Arun Kumar Wadhvani, Sulochna Wadhawani, Tripty Singh	Chp_15], “Computer Aided Diagnosis system for breast cancer Detection” Book Title : Optimizing Assistive Technologies for Aging Populations pp 378-395, IGI.	2015
Book Chapter	Kirti Paul , Manjaree Pandit , Laxmi Srivastava	“Levenberg-Marquardt Algorithm Based ANN for Nodal Price Prediction in Restructured Power System”, Electricity Distribution: Intelligent Solutions for Electricity Transmission and Distribution Networks, 2016, pp. 297-318, Springer Berlin Heidelber.	2016

**Citation index of faculty members and impact factor**

Name of Faculty	Designation	Highest Qualification	i10–index	h-index	Google Citation
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Member					
Dr. Laxmi Srivastava	Prof & Head	Ph.D.	43	21	1780
Dr. Manjaree Pandit	Professor	Ph.D.	31	17	1478
Prof. Hari Mohan Dubey	Assistant Professor	M.E.	11	11	301
Dr. Shishir Dixit	Assistant Professor	Ph.D.	-	5	46
Prof. Kuldeep Swarnkar	Assistant Professor	M.E.	3	5	91

Average Impact Factor of the publications and Name of the Major Journals in which publications are made (2016-17)

S. No.	Name of the Journal	No. of Research Papers	Average Impact Factor	SNIP	SJR
1	IEEE Transactions on Power Systems	04	5.68	-	3.757
2	IEE Proc- Gener. Trasm. and Distrib(UK),	06	1.576	1.479	1.187
3	Electric Power Systems Research(Elsevier)	04	2.688	1.515	1.167
4	Int. Journal of Electrical Power & Energy Systems(Elsevier)	10	3.289	1.785	1.562
5	Computers and Electrical Engineering(Elsevier)	03	1.570	1.323	0.490
6	International Journal of Applied Soft Computing(Elsevier)	08	3.541	2.037	1.308
7	Renewable Energy(Elsevier)	02	4.357	2.044	1.697
8	Energy conversion and management (Elsevier)	01	5.589	2.287	2.065
9	Neurocomputing (Elsevier)	02	3.317	1.589	0.968
10	Engineering applications of artificial intelligence(Elsevier)	01	2.894	1.943	1.047
11	Cognitive Computation (Springer)	01	3.441	-	-

12	Swarm and Evolutionary computing (Elsevier)	01	3.893	2.756	1.41
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ARCH-

S.No.	Faculty Name	Publications in the Journals Books + Papers + chapters in books
1.	<b>Sanjeev Khanna</b>	03+9+4=16
2.	<b>Arti Pipariya</b>	09
3.	<b>Anupama Shrivastava</b>	06
4.	<b>Urvashi Garud</b>	20
5.	<b>Rahul Mishra</b>	02
6.	<b>Manju Ojha</b>	10

Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\* Monographs           **01**

\* Chapter in Books   **04**

\* Books Edited         **01**

\* Books with ISBN/ISSN numbers with details of publishers **02**

\*Citation index of faculty members and impact factor

S.No	Name of faculty	Citation Index	Impact Factor	h-index	SNIP SJR
1	<b>Sanjeev Khanna</b>	Not registered in google scholar	-	-	-
2	<b>Arti Pipariya</b>	Not registered in google scholar	-	-	-
3	<b>Anupama Shrivastava</b>	Not registered in google scholar	-	-	-
4	<b>Urvashi Garud</b>	Not registered in google scholar	-	-	-
5	<b>Rahul Mishra</b>	Not registered in google scholar	-	-	-
6	<b>Manju Ojha</b>	Not registered in google scholar	-	-	-

## APPLIED SCIENCE

a) Publication per faculty

\* Number of papers published in peer reviewed journals  
(national /

International) by faculty

S.No.	Faculty Name	Publications in the Journals
7.	Dr. Abhay Mishra	15
8.	Dr. V.P. Shinde	30
9.	Dr. D.K. Jain	42
10.	Dr. Anjula Gaur	07
11.	Dr. Shourabh Bhattacharya	12
12.	Prof Jitendra Kumar	08
13.	Dr. Uday Pratap Singh	44
14.	Dr Peeti Gupta	02
15.	Dr Tanushksha Parasha	03
16.	Angad Ojha	01
17.	Sanat Kumar	05

\* Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

\* Monographs **NA**

\* Chapter in Books **05**

\* Books Edited **Nil**

\* Books with ISBN/ISSN numbers with details of publishers **13**

**Faculty Name: Dr D K Jain**

1. *Engineering Mathematics -I, Page 624+32, Seventh edition 2014-15*  
**ISBN 978-81-922064-0-0** By Shriram Prakashan Gwalior.
2. *Engineering Mathematics -II, Page 430 + 24, Seventh edition 2014-15*  
**ISBN 978-81-922064-1-7** By Shriram Prakashan Gwalior.
3. *Engineering Mathematics -III Page 568+32, New Edition 2016*  
**ISBN 978-81-922064-3-1** By Shriram Prakashan Gwalior.
4. *Discrete Structure,* Page 472+24, Fifth edition 2013-14

- ISBN 978-81-922064-2-4** By Shriram Prakashan Gwalior.
5. **Engineering Mathematics -I( FOR UPTU),**  
Page 592, first edition 2010  
By Vigyan Bodh Prakashan, AGRA
  6. **Discrete Mathematics (for BCA ISEM),**  
**ISBN 978-81-922064-6-2** Page 318, first edition 2009  
By Shriram Prakashan Gwalior.,
  7. **Calculus (for BCA IISEM), Pages 440 first edition 2010**  
**ISBN 978-81-922064-7-9** By Shriram Prakashan Gwalior.,
  8. **Advanced Calculus (for BCA IIISEM),**  
**ISBN 978-81-922064-8-6** Page 296, first edition 2010  
By Shriram Prakashan Gwalior.,
  9. **Differential Equations (for BCA IVSEM),**  
**ISBN 978-81-922064-9-3** pages 344 +10 first edition 2011  
By Shriram Prakashan Gwalior.,
  10. **Algebra, trigonometry & Geometry (in Hindi) (for B.Sc. SEM I),**  
**ISBN 978-81-922064-4-8** first edition 2011, pages 456  
By Shriram Prakashan Gwalior.
  11. **Mathematics (Matrix theory, Calculus, Geometry) (for B.Sc. SEM I)**  
**ISBN 978-93-820773-1-2** first edition 2014-15, pages 632  
By Shriram Prakashan Gwalior
  12. **Engineering Mathematics -I, Page 412+24, Eight edition 2016**  
For CBCS Scheme  
**ISBN 978-93-820774-5-9** By Shriram Prakashan Gwalior
  13. **Engineering Mathematics -II, Page 396 + 16, Eight Edition 2016**  
For CBCS Scheme  
**ISBN 978-93-820774-6-6** By Shriram Prakashan Gwalior

\*Citation index of faculty members and impact factor

S.No	Name of faculty	Citation Index	Impact Factor	h-index	SNIP SJR
1	Dr. Abhay Mishra	Not registered in google scholar	-	-	-
2	Dr. V.P. Shinde	Not registered in google scholar	-	-	-
3	Dr. D.K. Jain	03	-	1	-
4	Dr. Anjula Gaur	01	-	-	-
5	Prof. J.K. Muthale	Not registered in google scholar	-	-	-

6	Prof. A.S. Ojha	Not registered in google scholar	-	-	-
7	Dr. Shourabh Bhattacharya	73	-	3	-
8	Dr. Uday Pratap Singh	61	-	5	-
9	Dr Peeti Gupta	Not registered in google scholar	-	-	-
10	Dr Tanushksha Parasha	Not registered in google scholar	-	-	-
11	Prof D K Mishra	Not registered in google scholar	-	-	-
12	Sanat Kumar	Not registered in google scholar	-	-	-

#### 15. Details of patents and income generated

biotech–NIL-  
chemical nil

MCA : Nil

**Elex: -Income generated by Antenna testing.**

Civil NIL

CSE/IT – NIL

ARCH – NIL

HUMATNIES-NIL

APPLIED- NIL

ELECTRICAL-NIL

MECHANICAL

Two patents are filed:

- (i) Patent filed on the topic **“Sustainable Paper Recycling Plant”** dated on 01/10/2014. Positive **Novelty search report has been received.** The name of the applicants who filed the patent are **Dr C.S Malvi** and **Mr Vinay Bhaskar.**
- (ii) Patent filed on the topic **“Dust Removing Mechanism for cleaning Solar Panel Arrays”** dated on 07/05/2014. The name of the applicants who filed the patent are **Dr C.S Malvi, Ms Richa Aggarwal** and **Mr. Sunil Dohare**

## 16. Areas of consultancy and income generated

**biotech–NIL-**

**chemical Nil**

**Nil : nil**

**Elex; : Antenna Testing**

**Civil :**

- Over head tank design
- Intake well design
- Water supply and sewerage system design
- Multistorey building design
- Concrete mix design
- Highway pavement design
- Material Testing
- Soil testing – Safe bearing capacity.
- Water and waste water testing.

Consultancy has been provided in various central and state government departments like CPWD, MES, Indian Railways, Water Resources, PHE, Housing Board, SADA, GDA etc.. Also testing and consultancy is provided to large number of private contractors, builders, consultants, manufacturers, suppliers. The overall revenue generated from the consultancy services provided by the department during last four years amounts to approximately Rs. 60 Lacs/-.

**CSE/IT; NIL**

**ARCH**

S. no.	Project	Date	Amount in Rs.
1.	Design & Drawings of Regional office of M. P. RajyaViparan Board, Morena	Jan. 2011	152889/-
2.	Preparation of Housing lay out for the rehabilitation of villages Dhobni, Naharkheda and Suhela, District Sheopur, for Kaketo Dam	Jan. 2012	105058/-
3.	The consultancy charges for providing the Housing lay out for the rehabilitation of village Boorda District Shivpuri for Kaketo Dam	March, 2012	98931/-
4.	Providing consultancy for Interior Furnishing of IIDC Administration building, Gwalior	March, 2013	54540/-
5.	Checking of Design & Drawings of Hotel building of M/s Saloni Hotel & Resorts, Agra	June, 2013	49450/-
5.	Checking of Design & Drawings of IIDC, RCC overhead Tank & Sump well at Garment Park Gadaipura, Gwalior	June, 2013	19231/-
6.	Checking of Design & Drawings of IIDC, RCC overhead Tank & Sump well at SitapurPahadi, Morena (Phase-1)	Aug., 2013	24725/-
	Project Incharge IIDC for Industrial Area Development of Morena	2014-2015	2,00,000/-
	IIDC office Interior works	2014-2015	2,00,000/-
	MukhyaMantri Infrastructure Development scheme Phase II ( Became a part of smart city Proposal now)	2014-2015	7,50,000/- (received)

Total Amount ( 52 lakhs)		
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**ARCH-**

- The department also interacts with the industries as it also provides the testing/ consultancy in areas viz:
- Water testing for example testing hardness of water, its alkalinity, TDS, pH Value, Acidity etc.
- Oil testing e.g. Flashpoint, fire-point viscosity, acid value, moisture content.
- Analysis of various other chemicals

**APPLIED**

- The department also interacts with the industries as it also provides the testing/ consultancy in areas viz:
- Water testing for example testing hardness of water, its alkalinity, TDS, pH Value, Acidity etc.
- Oil testing e.g. Flashpoint, fire-point viscosity, acid value, moisture content.
- Analysis of various other chemicals

**ELECTRICAL**

Rupees 1,85,127 has been generated through testing (last 3 years).

**MECHANICAL**

S.No	Faculty Name	Title of Project	Agency	Period	Grant/Amount in(Rs Lakhs)
1	Dr. C. S. Malvi	Testing of brass coins	Mr Agrawal Trading Company Gwalior	2014	0.02 Lakhs
2	Dr. C.S. Malvi	Testing of brass coins	Mr Divya Trading Company Gwalior	2014	0.02 Lakhs
3	Dr. C.S. Malvi	Solar water Heating System Installation	Cancer Hospital Research Institute Gwalior	2014	0.02 lakhs
4	Dr. C.S. Malvi	Trolley Drawing specification and approval	Shri Mahalaxmi Agro Works, Burahanpur, M.P.	2015	0.08 lakhs
5	Dr. C.S. Malvi	Trolley Drawing specification and approval	M/s Faiz steel works, Bhopal	2015	0.09 lakhs
6	Dr. C.S. Malvi	Trolley Drawing specification and approval	M/s Rajesh Chandresh Agro Industries, Narsingpur	2016	0.12 lakhs
7	Dr. C.S. Malvi	Trolley Drawing specification and approval	JCBL Limited Lalru, Mohali Punjab	2016	0.15 lakhs
8	Dr. C.S. Malvi	Drawing Checking	RTO, Gwalior	2015-16	0.25 Lakhs
09	Dr. C.S. Malvi	Drawing Checking	RTO, Gwalior	2014-15	0.15 Lakhs
10	Dr. M.K. Gaur	AC Load Calculation	MelaPradhikaran	2015-16	0.10 Lakhs
11	Dr. M.K. Gaur	Performance of I/C Engine	Royal Hyundai	2014-15	0.05 Lakhs
12	Dr. A.K.	Food Tiffin	Collectorate,	2014-15	0.05 Lakhs

	Sharma	Dimensions	Gwalior		
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### 17. Faculty recharging strategies:

**Biotech :**Annual Increment in the Salart

Chemical: The faculty undergoes Faculty Development Programmes from time to time. The faculty is also sent to industry to stay tuned with the present scenario as & when required.

MCA : Faculty is encouraged for undertaking research and also present/ publish research papers in national/international seminars, conferences and journals.

- Faculty is motivated to generate new knowledge by engaging in cutting-edge research for overall development of students & society.
- Quality improvement Programme for faculty members are organized from by inviting resource persons from reputed national or international engineering colleges and industries.
- Faculty emphasize on value based education through multi-grade modern teaching methodologies and techniques.

Elex; Attending training Programmes and Faculty development

Programme at IIT & other institutes of higher learning.

Civil :

1. Faculty sent for training/conference etc.

Faculty Name	Faculty Training (attended) For (Seminar / Workshop/ Conference/ Symposium/ Others)	Nature of Training (Exposure/ interaction with industry / Teaching Competence/ Research Competence/ Management Skills )	Title of Training	Broad of Area of Training	Training Provider (Institution/ Organization / industry )	Institution/ Organization	Years (2016-2017)
Prof. A. Tiwari	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017
Prof. A. Tiwari	National Workshop	Exposure		TEQIP-II	IIT, Gandhinagar	Gandhinagar	24/09/2016 to 25/09/2016
Prof. A. Tiwari	National Workshop	Exposure	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Dr. R. Kansal	National Workshop	Exposure	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Prof. D. Rastogi	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017



Prof. D. Rastogi	National Workshop	Exposure	Land Use/ Land Cover Change Modelling and prediction	GIAN	Civil Engg. Deptt. MANIT Jaipur	Malaviya National Institute of Technology Jaipur	July 4 – 8, 2016
Prof. D. Rastogi	National Workshop	Exposure	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Prof. G. Bhadoriya	National Workshop	Teaching Competence	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Prof. G. Bhadoriya	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017
Prof. A. K. Agarwal	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017

CSE/IT- Attending Workshop/Seminar/FDP/STTP in industry Academic Organization

ARCH; - a) National committees b) International Committees c) Editorial  
Boards....

ELECTRICAL

The Faculty of the department participates in Conferences/ Seminars/ workshop/ Short term training programs organised by the institute as well as at various IITs, NITs, CPRI and other leading institutes/Research Organizations within the country.

HUMANTIES-

<b>Faculty Name</b>	<b>Attended No of seminar/STTP/workshops etc (last three years)</b>
<b>Sanjeev Khanna</b>	04
<b>Arti Pipariya</b>	08
<b>Anupama Shrivastava</b>	05
<b>Urvashi Garud</b>	10
<b>Rahul Mishra</b>	04
<b>Manju Ojha</b>	03

APPLIED SCIENCE

Faculty Name	Attended No of seminar/STTP/workshops etc (last three years)
Dr. Abhay Mishra	04
Dr. V.P. Shinde	10
Dr. D.K. Jain	13
Dr. Anjula Gaur	09
Dr. Shourabh Bhattacharya	06
Prof Jitendra Kumar	15
Dr. Uday Pratap Singh	00
Dr Peeti Gupta	06
Dr Tanushksha Parasha	01
Angad Ojha	13
Sanat Kumar	03
Ms Shweta Shrivastava	15

### MECHANICAL

All faculties update their knowledge by attending refresher courses, workshop, seminars, conferences, faculty development program and short-term training programs during vacation time.

### 18. Student projects

#### Biotech

Percentage of students who have done in-house projects including inter-departmental	90
Percentage of students doing projects in collaboration with industries / institutes	40

### MECHANICAL

- a) percentage of students who have done in-house projects including inter-departmental: 95%
- b) percentage of students doing projects in collaboration with industries / institutes: 5%

Chemical

- a) **Percentage of students who have done in – house projects including inter departmental / programme : 100 %**
- b) **Percentage of students placed for projects in organizations outside the institution, ie; in Research laboratories / Industry / other agencies : Nil**

**MCA**

- Percentage of students who have done in-house projects including interdepartmental

	<b>Percentage of students in-house Projects</b>
2013-14	04
2014-15	02
2015-16	02
2016-17	04

- Percentage of students doing projects in collaboration with Industries/ institutes

	<b>No. of students doing projects outside the institution</b>
2013-14	56
2014-15	58
2015-16	58
2016-17	56

**Elex :**

- percentage of students who have done in-house projects including inter-departmental - 80%
- percentage of students doing projects in collaboration with industries / institutes - 20%

## Civil

- **percentage of students who have done in-house projects including inter-departmental** - 100%
- **percentage of students doing projects in collaboration with industries / institutes** - NIL

\*Note: students take the help from outside agencies for data collection.

## CSE/IT

- percentage of students who have done in-house projects including inter-departmental : 100% (inhouse)
- percentage of students doing projects in collaboration with industries / institutes: NIL

## ARCH-

- a) Percentage of students who have done in-house projects including interdepartmental/Programmeme
- b)Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/ other agencies

## HUMANTIES- NIL

## APPLIED – NIL

## ELECTRICAL

- **Percentage of students who have done in-house projects including inter-departmental** 7%
- **Percentage of students doing projects in collaboration with industries / institutes:** 5%

## 19. Research Awards / recognitions received at the national and international level by

- Faculty
- Doctoral / post doctoral fellows
- Students

**Biotech-NIL-  
Chemical : nil  
MCA**

- Faculty:
  1. Dr. R. S. Jadon Academician of the Year Award by Junior JCS Gwalior in the year 2000.
  2. Dr. R.S. Jadon Chairman, CSI Gwalior Chapter for the session 2004-2005.
  3. Dr. Anshu Chaturvedi, Young Scientist Award, MPCOST, 2009.
- Doctoral/post doctoral fellows:       NIL
- Students:                                       NIL

Elex:

- Faculty

S.No.	Name of Faculty	Research Awards
1.	Dr. P. K . Singhal	<ul style="list-style-type: none"> <li>• Received AICTE career award for Young Teacher in 1999</li> <li>• Fellowship for training of Young Scientist of M.P. from M.P. Council of Science and Technology, Bhopal.</li> <li>• Received outstanding young person of Gwalior award for academic leadership in 1998.</li> <li>• Received outstanding young person of Gwalior award for Science and Technology Development in 2000.</li> </ul>
2.	Dr.Vandana Vikas Thakare	IFCE best women teacher.2013-14

- Doctoral / post doctoral fellows - NIL
- Students - NIL

**Civil**

- Faculty

- **Doctoral / post doctoral fellows**
- **Students**

- **Faculty:**

Dr. S.K. Jain - Young Scientist Award, AICTE

- Khosla Award
- Engineer's Institution of India Award

Dr. Sanjay Tiwari - Suchit Kumar Ghosh Memorial Prize

- **Students:** N.A.

## MECHANICAL

### o Faculty: 7

- **Dr. Pratesh Jayaswal** Received Gwalior Ratna Award for outstanding performance in field of education.
- **Dr. M. K. Gaur** received Gwalior Ratna Award (2012) in the field of Science and Technological Development.
- **Dr. M. K. Gaur** travel grant from DST as young scientist for attending UKERC Summer School at University of Sussex, Brighton UK
- **Dr. C.S. Malvi**, Associate Professor, Mechanical received the Madhya Pradesh Young Scientist Award by MPCST, Bhopal in 2004.
- **Dr. Manish Kumar Sagar** Received Gwalior Ratna Award for outstanding performance in Science and Technology.
- **Prof. Vedansh Chaturvedi** Assistant Professor, Mechanical received the Madhya Pradesh Young Scientist Award by MPCST, Bhopal in 2014.
- **Dr. A.K. Sharma and Prof. Akash Sood** Best Paper Award in International conference on Futuristic Trends in Engineering, Science, Humanities, and Technology (FTESHT-16) ISBN: 978-93-85225-55-0, 23rd -24th January, 2016, Gwalior

### o Doctoral / post-doctoral fellows: 3 faculty received the doctoral fellowship

- i. Dr. Manish K. Sagar
- ii. Dr. M.K. Gaur
- iii. Dr. C.S. Malvi

### o Students: Nil

## CSE/IT

- o Faculty
- o Doctoral / post doctoral fellows
- o Students

Name	Award / Recognition Received at International & National Level
Dr. Akhilesh Tiwari	Honoured with Outstanding Young Person of Gwalior Award in 2014 for Academic Leadership and Accomplishment by JCI Gwalior on 18 <sup>th</sup> April 2014.
Prof. R.R. Singh	Received Young Scientist Fellowship by MPCST in 2015

Prof. Vishakha Agarwal	Gold Medalist in M.Tech [CSE] .and Overall all branches topper in 2014-2016 batch
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**HUMANTIES- NIL**

**APPLIED – NIL**

**ELECTRICAL  
Faculty**

- Dr L. Srivastava worked as reviewer of research papers of various international journals of repute like IEEE Transactions on Power System and IEEE Transactions on Energy Conversion, IET Proceedings Generation, Transmission and Distribution, Electric Power Application, Power Electronics, Renewable Energy, Int. Journal of Computers & Electrical Engineering, Applied Soft Computing, Int. Journal of Electrical Power & Energy Systems Int. Journal of Electric Power Components and Systems etc.
- Dr. Manjaree Pandit received ISTE-Maharashtra Government National Research Award for work done by teachers of Engineering colleges.
- Dr.Manjaree Pandit received ISTE-Raja Rambapu Patil National Award for promising Engineering teacher.
- Dr. Manjaree Pandit worked as Expert member for Personality Test (PT) Board For The Engineering Services Examination 2016 held in UPSC, Dholpur House, Shahjahan Road, New Delhi from 7<sup>th</sup> November-10<sup>th</sup> November 2016.
- Prof Vishal Chaudhary received the gold medal for scoring highest marks in ME(ISD) at MITS Gwalior.
- Prof. Vishal Chaudhary received the silver medal for scoring second rank in Electrical engineering in RGPV.
- Mr. Saket Gupta selected for PhD. Program at Delhi Technical University

**Doctoral / post doctoral fellows**

- Manisha Sharma selected as faculty at NIT Hamirpur.

**Students :**

- Students of the department received various award in conference and technical events.
- Mr. Saket Gupta selected for PhD. Program at Delhi Technical University

**20. Seminars/ Conferences/Workshops/STTP organized and attended and the source of funding (national /international) with details of outstanding participants, if any.**

Biotech

Name of the faculty	Seminars/ Conferences/Workshops/STP Attended	The source of funding (national/international)	Date	Institute
Dr.Sunita Sharma	STC on “Environmental Engineering & Practices”	TEQIP-II	8-18 Mar, 2016.	MITS, Gwalior
Dr.Sunita Sharma	Symposium on “Novel and smart materials & Devices: Paradigm for fabrication & Characterization”.	TEQIP-II	05 Mar, 2016	MITS, Gwalior
Dr.Sunita Sharma	National Exhibition on “Innovative & Future Approaches in Science and Technology”	--	26 -28 Feb, 2015	MANIT, Bhopal from.
Dr.Sunita Sharma	workshop on “Molecular Characterization Techniques organized by Sophisticated Instrumentation Centre (SIC), under Continuing Education Program (CEP)	--	7-8 Mar, 2014.	IIT-Indore,
Dr.Sunita Sharma	Training program on “Pedagogical approaches in Technical Education”	--	3-8 May, 2014	ABV-IITM, Gwalior
Dr.Sunita Sharma	ISTE STTP on “Environmental Studies”	--	2-12 June, 2015	Indian Institute of Technology Bombay in MITS, Gwalior
Dr.Sunita Sharma	ISTE workshop on “Aakash for education”	--	10-11 Nov, 2012	Indian Institute of Technology Bombay on in MITS, Gwalior
Dr.Sunita Sharma	Hands on Training on 1. Statistical Methods in MATLAB 2. Simulink for System and Algorithm Modeling 3. Signal Processing with MATLAB 4. MATLAB Based Optimization Techniques	--	25-29 Mar, 2014	Organized by Mathworks in the Institute
Dr.Sunita Sharma	National Workshop on 'Intellectual Property Rights and Patents'	TEQIP-II	4 Feb, 2017	MITS, Gwalior
Hotam S. Chaudhar	Short term course on quality enhancement of teaching –	TEQIP-II	27Feb-09	MITS,Gwalior



y	learning process.		Mar, 2017.	
Hotam S. Chaudhary	National workshop on quality in technical education: A challenge	TEQIP-II	18-19 Nov, 2016	MITs, Gwalior
Hotam S. Chaudhary	Training Program on “Advances in chemical engineering”	TEQIP	21-25 Oct, 2014	MITs, Gwalior
Hotam S. Chaudhary	Training Program on “pedagogical approach in technical education”	TEQIP	3-8 May, 2014	MITs, Gwalior
Hotam S. Chaudhary	Fifth teachers/researcher training Program	UGC	1-25 May, 2012	IIS, Banaglore
Rahul Anand	Training Program on "Research Methodology"	TEQIP-II	11-16 Nov, 2013	MITs, Gwalior
Rahul Anand	Training Program on "Nature Inspired Optimization Techniques for Engineering Applications"	TEQIP-II	02-06 Dec, 2013	MITs, Gwalior
Rahul Anand	National Conference on "Advances in Mathematical Applications for Engineering and Technology	TEQIP-II	20-21 Dec, 2014	MITs, Gwalior
Vinod K. Jatav	The short course on Bioinformatics tools for analysis of genomics and proteomics data in livestock and poultry scheme	Centre for Bioinformatics	19-29 Jan, 2016	IICAR-NBAGR, Karnal
Vinod K. Jatav	ISTE STTP on “Environmental studies”	IIT Bombay	2-12 June, 2015	MITs, Gwalior
Vinod K. Jatav	A workshop on “Application of MATLAB for Engineering Computations	--	6-8 Feb, 2015	IITDM, Jabalpur
Vinod K. Jatav	A short term training program on “Research methodology”	--	11– 15 Nov, 2013	MITs, Gwalior
Vinod K. Jatav	Seminar on “Application of Bioinformatics in life science	--	8-9Mar, 2013	Jiwaji University, Gwalior
Vinod K. Jatav	ISTE workshop on ‘Aakash for Education’	--	10-11 Nov, 2012	IIT Bombay

Name of	Seminars/	the source of funding	Date	Institut
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the faculty	Conferences/Workshops/STTP organized	(national/international)		e
Dr Sunita Sharma	Worked as Secretary in One-Day National Workshop on 'Intellectual Property Rights and Patents' organized in association with IET Student Chapter	TEQIP-II	on Feb 4, 2017	MIT
Dr Sunita Sharma	Organized Short Term Course on 'Quality Enhancement on Teaching Learning Process'	TEQIP-II	27 Feb to 09 March 2017	MIT, Gwalior
Dr Sunita Sharma	Worked as Secretary in Two-Day National Workshop on 'Quality in Technical Education" A Challenge'	TEQIP-II	18-19 November, 2016 at	MIT, Gwalior
Dr Sunita Sharma	Organized STTP on 'Research Methodology'	TEQIP-II	11-15 November, 2013	MIT, Gwalior
Dr Sunita Sharma	Organized Workshop on 'Computer Aided Drug Design'	TEQIP-II	14-15 April, 2013	MIT, Gwalior
Prof. H.S. Chaudhary	Organized Workshop on 'Computer Aided Drug Design'	TEQIP-II	14-15 April, 2013	MIT, Gwalior
Vinod K. Jatav	Organized Workshop on 'Computer Aided Drug Design'	TEQIP-II	14-15 April, 2013	MIT, Gwalior
Rahul Anand	Organized Workshop on 'Computer Aided Drug Design'	TEQIP-II	14-15 April, 2013	MIT, Gwalior

### MECHANICAL

Seminars/Conferences/Workshops/STTP organized and attended and the source of funding (National/International) with details of outstanding participants, if any.

Organised				
Name of the faculty	Seminars/Conferences/Workshops/STTP organized	Title	the source of funding (national/international)	Year
Dr. M. K. Gaur	Workshop	Hybrid Solar PVT Technologies	National	2014
Dr. C. S. Malvi	Workshop	Innovations in Energy	National	2015
Dr. A. K. Sharma	Workshop	Finite Element Method for Engineers	National	2016
Dr. M. K. Gaur	Workshop	Vehicle Dynamics	National	2016
Dr. Manish K. Sagar	Workshop	Manufacturing Systems	National	2016
Dr. Manish K. Sagar	STTP	Advances in Manufacturing Systems	National	2017
Dr. Pratesh Jayaswal	STC	Quality Enhancement of Teaching-Learning Processes	National	2017
Dr. M. K. Gaur and Dr. C. S. Malvi	STC	Solar energy applications	National	2017

<b>Attended</b>				
<b>Name of the faculty</b>	<b>Seminars/ Conferences/ Workshops /STTP Attended</b>	<b>Topic</b>	<b>the source of funding (national /international)</b>	<b>Year</b>
Dr. M. K. Gaur	Workshop	Advances in Manufacturing Systems	National	2017
Dr. M. K. Gaur	Workshop	Intellectual Property Right and Patents	National	2017
Dr. M. K. Gaur	FDP	How to motivate the students towards self-employment	National	2016
Dr. M. K. Gaur	Workshop	Finite Element Method for Engineers	National	2016
Dr. M. K. Gaur	Workshop	Manufacturing Systems	National	2016
Dr. M. K. Gaur	Workshop	Quality in Technical Education: A Challenge	National	2016
Dr. M. K. Gaur	Workshop	Important Challenges in Power Sector	National	2015
Dr. M. K. Gaur	Workshop	Innovations in Energy	National	2015
Dr. M. K. Gaur	Workshop	Innovations in Teaching and Research Methods,	National	2015
Dr. M. K. Gaur	Workshop	Fluid Mechanics	National	2014
Dr. M. K. Gaur	STTP	Research Methodology	National	2013
Dr. M. K. Gaur	Workshop	Engineering Thermodynamics	National	2012
Dr. M. K. Gaur	STTP	Photovoltaic Thermal (PVT) Applications	National	2011
Dr. M. K. Gaur	STTP	Building Integrated Photovoltaic Thermal System	National	2011
Dr. P. Jayaswal	Workshop	Advances in Manufacturing Systems	National	2017
Dr. P. Jayaswal	Workshop	Intellectual Property Right and Patents	National	2017
Dr. P. Jayaswal	Workshop	Finite Element Method for Engineers	National	2016
Dr. P. Jayaswal	Workshop	Manufacturing Systems	National	2016
Dr. P. Jayaswal	Workshop	Quality in Technical Education: A Challenge	National	2016
Dr. P. Jayaswal	Conference	Fault Diagnosis of Rolling Element Bearing based on Vibration & Current Signatures: An Optimal Network Parameter Selection,	National	2016
Dr. P. Jayaswal	Conference	Effects of Artificial Neural Network Parameters on REB Fault Diagnosis	National	2016
Dr. P. Jayaswal	Short Term Course (STC)	Environmental Engineering & Practices	National	2016

Dr. P. Jayaswal	FDP	Research Methodology in Business Entrepreneurship Management (Technical Teachers Training Programme)	National	2016
Dr. P. Jayaswal	Workshop	Innovations in Energy	National	2015
Dr. P. Jayaswal	Workshop	Hybrid Solar PVT Technologies	National	2014
Dr. P. Jayaswal	Workshop	Experience and good practices on improving transition rate of Students	National	2014
Dr. P. Jayaswal	Workshop	Teaching and Research methodology	National	2014
Dr. P. Jayaswal	workshop	Engineering Mechanics	National	2013
Dr. P. Jayaswal	workshop	Engineering Thermodynamics	National	2012
Dr. P. Jayaswal	workshop	One-week MHRD sponsored workshop on Education through Aakash Tablet.	National	2012
Dr. P. Jayaswal	Training	TEQIP MIS training under world bank project.	National	2012
Dr. P. Jayaswal	Training	Training programme under TEQIP-II on Web Based Management Information System	National	2012
Dr. P. Jayaswal	International Conference on Advances in Robotic, Mechanical Engineering and Design, Bangalore, India,	The investigation of the Condition of gear oil and its effects Using wear debris analysis technique	National	2011
Dr. P. Jayaswal	5th International conference on advances in Mechanical Engineering SVNIT, Surat, India	Wear Particle analysis of I C Engine Lubricating oil,	National	2011
Dr. C. S. Malvi	STC	New Product Development using System Engg. Principles	National	2017
Dr. C. S. Malvi	workshop	Advances in Manufacturing Systems	National	2017
Dr. C. S. Malvi	workshop	Intellectual Property Right and Patents	National	2017
Dr. C. S. Malvi	workshop	Finite Element Method for Engineers	National	2016
Dr. C. S. Malvi	workshop	Manufacturing Systems	National	2016
Dr. C. S. Malvi	STC	Environmental Engineering & Practices	National	2016

Dr. C. S. Malvi	workshop	Fluid Mechanics	National	2014
Dr. C. S. Malvi	workshop	Engineering Mechanics,	National	2013
Dr. C. S. Malvi	workshop	Engineering Thermodynamics	National	2012
Dr. Manish Kumar Sagar	workshop	Advances in Manufacturing Systems	National	2017
Dr. Manish Kumar Sagar	workshop	Intellectual Property Right and Patents	National	2017
Dr. Manish Kumar Sagar	workshop	Finite Element Method for Engineers	National	2016
Dr. Manish Kumar Sagar	workshop	Manufacturing Systems	National	2016
Dr. Manish Kumar Sagar	Workshop	Quality in Technical Education: A Challenge	National	2016
Dr. Manish Kumar Sagar	Faculty Development Programm	How to motivate the student towards self employment	National	2016
Dr. Manish Kumar Sagar	Workshop	Digital India	National	2016
Dr. Manish Kumar Sagar	Workshop	Applied Computing	National	2016
Dr. Manish Kumar Sagar	Faculty Development Programme	Research Methodology in Business Entrepreneurship Management	National	2016
Dr. Manish Kumar Sagar	Faculty Development Programme	Promoting Quality in Higher Technical Education	National	2016
Dr. Manish Kumar Sagar	Short Term Training Programme	Applications of Optimization Techniques for Engineering & Technology	National	2015
Dr. Manish Kumar Sagar	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Dr. Manish Kumar Sagar	Workshop	Innovation in Teaching & Research Methods	National	2015
Dr. Manish Kumar Sagar	Workshop	Scheduling of Construction Project	National	2015
Dr. Manish Kumar Sagar	Workshop	Right to Information Act (RTI ACT) 2005	National	2014
Dr. Manish Kumar Sagar	Workshop	Emerging Trends in Materials for Engineering Applications	National	2014
Dr. Manish Kumar Sagar	Short Term Training Programme	Industrial Engineering Techniques	National	2014
Dr. Manish Kumar Sagar	Faculty Development Programme	Entrepreneurship (technical teacher's training programme-TTTP)	National	2014
Dr. Manish Kumar Sagar	Workshop	Engineering Mechanics	National	2013
Dr. Manish Kumar Sagar	Short Term Training Programme	Research Methodology	National	2013
Dr. Manish Kumar Sagar	Trainer's Training Programme	Social Harmony & National Integrity	National	2013
Dr. Manish Kumar Sagar	State Level	Ethical Education & Water Saving	National	2013

	Seminar			
Dr. Manish Kumar Sagar	Workshop	Engineering Thermodynamics	National	2012
Dr. Manish Kumar Sagar	Workshop	Aakash for Education	National	2012
Dr. Manish Kumar Sagar	Faculty Development Programme	Demand Chain Management	National	2012
Dr. Manish Kumar Sagar	Staff Development Programme	Evolutionary Computing Techniques for Numerical and Engineering Optimization	National	2011
Dr. Manish Kumar Sagar	Staff Development Programme	Soft Computing Techniques for Improvement of Process and Systems in Chemical Engineering	National	2011
Dr. Manish Kumar Sagar	Certificate Course	Lean Manufacturing	National	2011
Prof. R. P. Kori	STC	New Product Development using System Engineering Principles	National	2017
Prof. R. P. Kori	STC	Solar Energy Applications	National	2017
Prof. R. P. Kori	Workshop	Intellectual property right and patent	National	2017
Prof. R. P. Kori	Workshop	Advances in Manufacturing Systems	National	2017
Prof. R. P. Kori	Workshop	Air Conditioning: Sizing and Calculations	National	2017
Prof. R. P. Kori	Workshop	Manufacturing system	National	2016
Prof. R. P. Kori	Workshop	Quality In Technical Education: A Challenge	National	2016
Prof. R. P. Kori	Workshop	TEQIP Pedagogical Conclave	National	2016
Prof. R. P. Kori	Workshop	Finite Element Method for Engineers	National	2016
Prof. R. P. Kori	Workshop	Fluid Mechanics	National	2014
Prof. R. P. Kori	Workshop	Engineering Mechanics,	National	2013
Prof. R. P. Kori	Workshop	Engineering Thermodynamics	National	2012
Dr. A, K. Sharma	Workshop	Intellectual Property Right and Patents	National	2017
Dr. A, K. Sharma	Workshop	Advances in Manufacturing Systems	National	2017
Dr. A, K. Sharma	STC	Quality Enhancement of Teaching- Learning Processes	National	2017
Dr. A, K. Sharma	STTP	Environmental Engineering & Practices	National	2016
Dr. A, K. Sharma	Workshop	Applied Computing	National	2016
Dr. A, K. Sharma	Workshop	Research Methodology	National	2016
Dr. A, K. Sharma	Workshop	Powder Metallurgy and Advanced Composites	National	2016
Prof. V. Chaturvedi	Workshop	Quality in Technical Education: A Challenge	National	2016

Dr. A, K. Sharma	Workshop	Additive Manufacturing	National	2016
Dr. A, K. Sharma	Workshop	Manufacturing Systems	National	2016
Dr. A, K. Sharma	Workshop	Finite Element Method for Engineers	National	2016
Dr. A, K. Sharma	Workshop	Analysis of nonlinear problems by FEM	National	2016
Dr. A, K. Sharma	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Dr. A, K. Sharma	STTP	Applications of optimization technique for engineering & technology	National	2015
Dr. A, K. Sharma	Workshop	Pedagogical Approach in Technical Education	National	2014
Dr. A, K. Sharma	Workshop	Teaching & Research Methodology	National	2014
Dr. A, K. Sharma	Workshop	Fluid Mechanics	National	2014
Dr. A, K. Sharma	Workshop	Engineering Mechanics	National	2013
Dr. A, K. Sharma	Workshop	Engineering Thermodynamics	National	2012
Dr. A, K. Sharma	Workshop	Aakash for Education	National	2012
Dr. A, K. Sharma	STTP	Evolutionary computing techniques for numerical and engineering optimization	National	2011
Prof. V. Chaturvedi	STTP	Advances in Manufacturing Systems	National	2017
Prof. V. Chaturvedi	Workshop	Quality Enhancement of Teaching- Learning Processes	National	2017
Prof. V. Chaturvedi	Workshop	Manufacturing Systems	National	2016
Prof. V. Chaturvedi	Workshop	Environmental Engineering & Practices	National	2016
Prof. V. Chaturvedi	Workshop	Applied Computing	National	2016
Prof. V. Chaturvedi	Workshop	Research Methodology	National	2016
Prof. V. Chaturvedi	Workshop	Additive Manufacturing	National	2016
Prof. V. Chaturvedi	Workshop	Manufacturing Systems	National	2016
Prof. V. Chaturvedi	Workshop	Finite Element Method for Engineers	National	2016
Prof. V. Chaturvedi	Workshop	Powder Metallurgy & Advanced Composite	National	2016
Prof. V. Chaturvedi	STTP	Design of Experiments	National	2015
Prof. V. Chaturvedi	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Prof. V. Chaturvedi	STTP	Applications of optimization technique for engineering & technology	National	2015
Prof. V. Chaturvedi	Workshop	Pedagogical Approach in Technical Education	National	2014



Prof. V. Chaturvedi	Workshop	Hybrid Solar PVT Technologies	National	2014
Prof. V. Chaturvedi	Workshop	Teaching & Research Methodology	National	2014
Prof. V. Chaturvedi	Workshop	Research Methodology	National	2013
Prof. V. Chaturvedi	Workshop	Engineering Mechanics	National	2013
Prof. V. Chaturvedi	Workshop	Engineering Thermodynamics	National	2012
Prof. V. Chaturvedi	Workshop	Aakash for Education	National	2012
Prof. V. Chaturvedi	STTP	Evolutionary computing techniques for numerical and engineering optimization	National	2011
Dr. JyotiVimal	Workshop	Advances in Manufacturing Systems	National	2017
Dr. JyotiVimal	STC	Quality Enhancement of Teaching- Learning Processes	National	2017
Dr. JyotiVimal	Workshop	Manufacturing Systems	National	2016
Dr. JyotiVimal	STC	Environmental Engineering & Practices	National	2016
Dr. JyotiVimal	Workshop	Applied Computing	National	2016
Dr. JyotiVimal	Workshop	Research Methodology	National	2016
Dr. JyotiVimal	Workshop	Additive Manufacturing	National	2016
Dr. JyotiVimal	STTP	Manufacturing Systems	National	2016
Dr. JyotiVimal	Workshop	Finite Element Method for Engineers	National	2016
Dr. JyotiVimal	STTP	Analysis of nonlinear problems by FEM	National	2016
Dr. JyotiVimal	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Dr. JyotiVimal	Workshop	Applications of optimization technique for engineering & technology	National	2015
Dr. JyotiVimal	Workshop	Pedagogical Approach in Technical Education	National	2015
Dr. JyotiVimal	Workshop	Hybrid Solar PVT Technologies	National	2014
Dr. JyotiVimal	Workshop	Teaching & Research Methodology	National	2014
Dr. JyotiVimal	Workshop	Research Methodology	National	2013
Dr. JyotiVimal	Workshop	Engineering Mechanics	National	2013
Dr. JyotiVimal	Workshop	Engineering Thermodynamics	National	2012
Dr. JyotiVimal	Workshop	Aakash for Education	National	2012
Dr. JyotiVimal	STTP	Evolutionary computing techniques for numerical and engineering optimization	National	2011



Prof. D. K. Kasdekar	STTP	Recent Trends in Renewable Energy	National	2012
Prof. D. K. Kasdekar	STTP	Significance of Rapid Prototyping and Rapid Tooling in Indian industry	National	2013
Prof. D. K. Kasdekar	Workshop	Research Methodology	National	2013
Prof. D. K. Kasdekar	STC	Advanced Manufacturing Technologies	National	2013
Prof. D. K. Kasdekar	Workshop	Advanced Optimization Techniques for Engineers & Professionals	National	2013
Prof. D. K. Kasdekar	Workshop	Engineering Mechanics	National	2013
Prof. D. K. Kasdekar	Workshop	Teaching and Research Methodology	National	2014
Prof. D. K. Kasdekar	STTP	Hybrid Solar PVT Technologies	National	2014
Prof. D. K. Kasdekar	Workshop	Fluid Mechanics	National	2014
Prof. D. K. Kasdekar	STTP	Optimization Techniques for Engineers and Professionals	National	2014
Prof. D. K. Kasdekar	Workshop	Pedagogical Approaches in Technical Education	National	2014
Prof. D. K. Kasdekar	Workshop	Innovations in Teaching and Research Methods	National	2015
Prof. D. K. Kasdekar	Workshop	Conclave on Mechanical Sciences	National	2015
Prof. D. K. Kasdekar	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Prof. D. K. Kasdekar	Workshop	Applications of Optimization Techniques for Engineering & Technology	National	2015
Prof. D. K. Kasdekar	Workshop	Additive Manufacturing	National	2016
Prof. D. K. Kasdekar	Workshop	Novel and Smart Materials & Devices: Paradigm for fabrication & Characterization	National	2016
Prof. D. K. Kasdekar	Workshop	Finite Element Methods and Engineers	National	2016
Prof. D. K. Kasdekar	Workshop	Applied Computing	National	2016
Prof. D. K. Kasdekar	Workshop	Environmental Engineering & Practices	National	2016
Prof. D. K. Kasdekar	Workshop	3-D Animation	National	2016
Prof. D. K. Kasdekar	Workshop	Quality in technical education: A challenge	National	2016
Prof. D. K. Kasdekar	Workshop	CAD/CAM	National	2016
Prof. D. K. Kasdekar	STTP	FDP on Advances in Product Design and Manufacturing 'APDM'	National	2017
Prof. D. K. Kasdekar	STTP	Structural design using ANSYS	National	2017

Prof. SharadAgrawal	SOTP	Intellectual property rights and patents	National	2017
Prof. SharadAgrawal	Workshop	Infrastructure development	National	2017
Prof. SharadAgrawal	SOTP	Structural design using ANSYS	National	2016
Prof. SharadAgrawal	STC	Quality in technical education: A challenge	National	2016
Prof. SharadAgrawal	SOTP	Tribology of soft matters: Bio-tribology microsystems and automotive applications	National	2016
Prof. SharadAgrawal	SOTP	Faculty Development Programme in Entrepreneurship	National	2016
Prof. SharadAgrawal	Workshop	Applied Computing	National	2016
Prof. SharadAgrawal	SOTP	Environmental Engineering & Practices	National	2016
Prof. SharadAgrawal	Workshop	Novel and Smart Materials & Devices: Paradigm for fabrication & Characterization	National	2016
Prof. SharadAgrawal	Workshop	Additive Manufacturing	National	2016
Prof. SharadAgrawal	SOTP	Finite Element Methods for Engineering Applications	National	2015
Prof. SharadAgrawal	SOTP	Application of optimization Technique for engineering and technology	National	2015
Prof. SharadAgrawal	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Prof. SharadAgrawal	Workshop	Effective Teaching and Pedagogical Practices	National	2015
Prof. SharadAgrawal	Conference	Ethics of Technology and Business Entrepreneurship Management	National	2015
Prof. SharadAgrawal	Workshop	Innovations in Teaching & Research Methods	National	2015
Prof. SharadAgrawal	SOTP	Fluid Mechanics	National	2014
Prof. SharadAgrawal	SOTP	Pedagogical Approaches in Technical Education	National	2014
Prof. SharadAgrawal	Workshop	Teaching and Research Methodology	National	2014
Prof. SharadAgrawal	Workshop	Advanced Optimization Techniques for Engineers & Professionals	National	2013
Prof. SharadAgrawal	SOTP	Engineering Mechanics	National	2013
Prof. SharadAgrawal	SOTP	Research Methodology	National	2013

Prof. VaibhavShivhare	Workshop	Quality in Technical Education: A challenge	National	2016
Prof. VaibhavShivhare	STTP	FDP in Entrepreneurship	National	2016
Prof. VaibhavShivhare	Workshop	Applied Computing	National	2016
Prof. VaibhavShivhare	STC	Environmental Engineering & Practices	National	2016
Prof. VaibhavShivhare	Workshop	Novel and Smart materials and Devices: Paradigm for fabrication and characterization	National	2016
Prof. VaibhavShivhare	FDP	Faculty development programme on research methodology in business entrepreneurship management	National	2016
Prof. VaibhavShivhare	STTP	Finite element methods for engineering applications	National	2015
Prof. VaibhavShivhare	STTP	Application of optimization techniques for engineering and technology	National	2015
Prof. VaibhavShivhare	Workshop	Application of MATLAB in electrical Engineering	National	2015
Prof. VaibhavShivhare	FDP	FDP on Effective Teaching and Pedagogical Practices	National	2015
Prof. VaibhavShivhare	Conference	Ethics of technology and business entrepreneurship management	National	2015
Prof. VaibhavShivhare	Workshop	Innovation in teaching and research methods	National	2015
Prof. VaibhavShivhare	Workshop	Fluid Mechanics	National	2014
Prof. VaibhavShivhare	STTP	Pedagogical Approach in Technical Education	National	2014
Prof. VaibhavShivhare	Workshop	Teaching & Research Methodology	National	2014
Prof. VaibhavShivhare	STTP	Mathematical models and methods in engineering	National	2013
Prof. VaibhavShivhare	Workshop	Engineering Mechanics	National	2013
Prof. VaibhavShivhare	STTP	Research Methodology	National	2013

Dr.AmitAherwar	SOTP	Optimization Techniques for Engineering Design	National	2013
Dr.AmitAherwar	SOTP	Computational and Experimental methods for Advanced Research in Composite	National	2013
Dr.AmitAherwar	SOTP	Nanotechnology and its applications	National	2013
Dr.AmitAherwar	Seminar	Electron Microscopy	National	2014
Dr.AmitAherwar	Workshop	Intellectual Property Rights	National	2014
Dr.AmitAherwar	National symposium	Biomaterials and Bio-Engineering	National	2014
Dr.AmitAherwar	Workshop	Application of MATLAB in Electrical Engineering	National	2015
Dr.AmitAherwar	National symposium	Novel and smart materials and Devices: Paradigm for fabrication and characterization	National	2016
Dr.AmitAherwar	Workshop	Applied Computing	National	2016
Dr.AmitAherwar	Workshop	Quality in Technical Education: A Challenge	National	2016
Dr.AmitAherwar	SOTP	Quality Enhancement of Teaching-Learning Processes	National	2017
Dr.AmitAherwar	Workshop	Intellectual Property Rights & Patents	National	2017
Dr.AmitAherwar	Workshop	Air conditioning: Sizing and calculations	National	2017

Chemical

Academic Year	Date	Name of the conference / workshop / seminars	Source of funding (national / international) / Name of funding agency
2013-14	21 <sup>st</sup> – 25 <sup>th</sup> October	Short Term Training Programme (SOTP) on “Advances in Chemical Engineering”	TEQIP -II
2013-14	14 <sup>th</sup> -15 <sup>th</sup> January	Workshop on “Computational Fluid Dynamics”	TEQIP -II
2014-15	9 <sup>th</sup> February	Seminar on “Recent Advances in Solar	TEQIP -II

		Energy”	
2015-16	29 <sup>th</sup> February	Seminar on “Recent Trends in Waste Water Treatment”	TEQIP -II

MCA

Month & Year	Seminars/conferences/workshops
Feb 2004	National Workshop on Computer Vision, Graphics and Image Processing (WVGIP’04) organized in the Department of Computer Applications on 21-22 <sup>nd</sup> Feb 2004 and partially funded by A.I.C.T.E.
March 2015	Two days Workshop on “Innovations in teaching and research methods” organized by Department of Computer Application sponsored by QIP
March 2016	One day Workshop on “Applied Computing” organized by Department of Computer Applications sponsored by QIP

b) In ternational: NIL

Elex:

Name of the faculty	Seminars/ Conferences/Workshops/STTP organized	the source of funding (national/international)
Dr. P.K. Singhal	Recent Trends in Microwave Engineering.	TEQIP Phase-II
Dr. Rekha Gupta	Recent Advances In Communication Engineering	AICTE (QIP)
Dr. P.K. Singhal	Recent Advances In Communication Engineering	TEQIP Phase-II
Dr. P.K. Singhal	Recent Advances in Microwave Engineering	TEQIP Phase-II
Dr. Sarita Singh Bhadauria	Emerging Trends in Communication, Control and Networking .	TEQIP Phase-II

Dr. P.K. Singhal	Workshop on Advances in Microwave Engineering.	TEQIP Phase-II
Dr. Vandana Vikas Thakre	Seminar on Recent Trends in Electronics Engineering.	TEQIP Phase-II
Dr. Sarita Singh Bhadauria	Workshop on Recent trends in Digital Signal Processing Applications	TEQIP Phase-II
Dr. Rekha Gupta	Recent Advances In Communication Engineering	TEQIP Phase-II
Dr. Sarita Singh Bhadauria	Advanced Techniques in Signal Processing & Communication,	TEQIP Phase-II
Dr. P.K. Singhal	Recent Advances in Microwave Engineering	AICTE (QIP)
Dr. Bimal Garg	Recent Advances in Microwave Engineering.	TEQIP Phase-II
Dr. P.K. Singhal	Recent Advances in Microwave Engineering.	AICTE (QIP)

Civil

**a) National:**

S. No.	Details of activities	Name of Programme	Dates	Source of Funding
1	STTP	Utilization of Waste in Construction & Energy Sectors	21 <sup>st</sup> - 25 <sup>th</sup> October, 2013	TEQIP - II
2	Workshop	Application of GIS & Remote Sensing in Engineering	25 <sup>th</sup> – 26 <sup>th</sup> February, 2014	TEQIP - II
3	STC	Earthquake resistant design of structures	19 <sup>th</sup> – 29 <sup>th</sup> March, 2014	QIP
4	Workshop	Use of Local Waste material in Rural Road	11 <sup>th</sup> September,	TEQIP – II

			2014.	
5	National Conference	Alternative and Innovative Construction Materials & Techniques	27 <sup>th</sup> September, 2014	CRRI, New Delhi
6	Workshop	Scheduling of Construction Projects	24 <sup>th</sup> & 25 <sup>th</sup> January, 2015	TEQIP – II
7	National Conference	Green Building For Sustainable Development	19 <sup>th</sup> – 20 <sup>th</sup> March, 2015	TEQIP – II
8	Workshop	“Green Buildings for Sustainable Development	September 23 <sup>rd</sup> , 2016	TEQIP – II
9	Short Term Course (STC)	Environmental Engineering & Practices	March 08 <sup>th</sup> – 18 <sup>th</sup> , 2016.	TEQIP – II
10	Workshop	Current practices in road construction	3 <sup>rd</sup> March 2017	TEQIP – II

**b) International: NIL**

CSE/IT

Name of the faculty	Seminars/ Conferences/Workshops/STTP organized	the source of funding (national/international)
Punit Kumar Johari	Organized a expert lecture (Under TEQIP-II) on “Approximate Reasoning: Fuzzy Set Theory and Applications” delivered by Prof. Tanmoy Som, IIT, BHU, 01 March 2017	National

Punit Kumar Johari	Organized a expert lecture (Under TEQIP-II) Data Envelopment Analysis: An application to measure the relative performance efficiencies of DMUs delivered by Prof. Shiv Prasad Yadav, IIT, Roorkee, 05 March 2017	National
Punit Kumar Johari	Organized a expert lecture (Under TEQIP-II) Modeling Neural Networks delivered by Prof. Rama Murthy Garimella, IIIT Hyderabad, 8 <sup>th</sup> and 9 <sup>th</sup> March 2017	National
Neha Bharadwaj	One Week FDP on Innovative Trends in Computing Technology & Engineering(Under TEQIP-II) was held from 21st – 25th March, 2017.	National
Prof. Manish Dixit	Organized a One day National Conference on “Cyber Forensics: Tools and Techniques”(Under TEQIP-II) held on 18 Feb 2017.	National
Dr. Akhilesh Tiwari	National Conference on Research Methodology (Under TEQIP Phase II) January 29 <sup>th</sup> ,2016	National
Dr. Akhilesh Tiwari	Organized a National Conference on Advances in Information and Communication Technology (under TEQIP-II) during 4-5 Feb., 2016.	National
Dr. Akhilesh Tiwari	Organized a National Workshop titled “Research Methodology” (under TEQIP-II) on 29th January 2016 at MITS Gwalior	National



Dr. Sanjiv Sharma	Workshop On Cyber World and Its Related Crime(Under TEQIP Phase li)  February 25th,2016	National
Prof.Neha Bhardwaj	National Conference on advances In Information and Communication Technology (NCAICT-2015)  (Under TEQIP Phase II)  Feb 23 <sup>rd</sup> – 24 <sup>th</sup> , 2015	National
Dr. Akhilesh Tiwari	Two-week ISTE Workshop on “Cyber Security” conducted by IIT Bombay from 10-20 July 2014 at MITS Gwalior. This workshop was held under the National Mission on Education through ICT (MHRD).	National
Dr. Rajeev kumar singh	Organized “ISTE Workshop on Computer Networking” under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 30/06/2014 to 05/07/2014.	National
Dr. Akhilesh Tiwari	Organized a three days Workshop on “Cloud Computing” under TEQIP Phase-II during 13th-15th May 2014 at MITS Gwalior.	National
Dr.Sanjiv Sharma	“ISTE Workshop on Computer Programming” under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 16-21 July 2014.	National

Prof. Neha Bhardwaj	Two Week NMEICT Workshop on Introduction to Design of algorithm, conducted by IIT Kharagpur 25-30 may 2015	National

**Seminars/ Conferences/Workshops/STTP attended**

Prof. Manish Dixit	National Workshop on Research Competence  Cyber Security Threats and Forensics  Cyber security MANIT , Bhopal 23-24 March2017	National
Prof. Manish Dixit	National Workshop on Teaching Competence, Research Competence  Cyber Forensics: Tools and Techniques  Cyber Forensics Institution: MITS, Gwalior 18 Feb2017	National
Prof. Manish Dixit	National Workshop on Teaching Competence,  App Development (Android/iOS)  Android Institution: MITS, Gwalior 10 March2017	National

Prof. Manish Dixit	National Workshop on Skill Development  Prospects of Entrepreneurship and Skill Development  Entrepreneurship and Skill Development  Institution:  MITS, Gwalior  27 March2017	National
Prof. Manish Dixit	National workshop on Teaching Competence  Quality of Technical Education: A challenge  Technical Education  Institution:  MITS, Gwalior  18-19 Nov2016	National
Prof. Manish Dixit	Conclave on Teaching Competence, Research Competence and Management Skills  TEQIP Pedagogical Conclave on Electrical Sciences  Teaching Skills  Institution  IIT Gandhinagar  24-24 Sep2016	National
Prof. Manish Dixit	Attended Workshop on <b>Educational Resources Planning System (BLMS &amp; BGAS)</b> 07-08 Feb, 2015 at	National

	ABV-IIITM, Gwalior.	
Prof. Manish Dixit	Attended National Workshop on <b>Innovations in Teaching &amp; Research Methods</b> on 25-26 March, 2015 under QIP Scheme at MITS, Gwalior.	National
Prof. Manish Dixit	Attended ISTE workshop on <b>Computer Programming</b> from May 20 <sup>th</sup> , 2014 to June 21 <sup>st</sup> 2014 at IIT-Bombay.	National
Prof. Manish Dixit	Attended ISTE workshop on <b>Cyber Security</b> from July 10 <sup>th</sup> , 2014 to July 20 <sup>th</sup> 2014 at IIT-Bombay.	National
Prof. Manish Dixit	Attended Workshop on Teaching and research methodology from March 28-29, 2014 at MITS, Gwalior.	National
Prof. Manish Dixit	Attended Faculty enablement Program on Software Engineering & Agile Software Development from 21 <sup>st</sup> - 25 <sup>th</sup> Dec, 2015 at MIT, Aurangabad.	National
Prof. Manish Dixit	Attended ISTE STTP on Computer Programming from July 16 <sup>th</sup> - 21 <sup>st</sup> , 2015 at MITS, Gwalior.	National
Prof. Manish Dixit	Attended ISTE STTP on Introduction to Design of Algorithms from April 27 <sup>th</sup> - May 30 <sup>th</sup> , 2015 at MITS, Gwalior.	National
Prof. Manish Dixit	Attended Workshop on Cloud Computing from May 13 <sup>th</sup> to 15 <sup>th</sup> 2014 at MITS, Gwalior.	National
Prof. Manish Dixit	Attended ISTE workshop on <b>Computer Networking</b> from May 28 <sup>th</sup> , 2014 to July 5 <sup>th</sup> 2014 at IIT-Bombay.	National
Dr. Akhilesh	Participated in a <b>two week ISTE</b>	National

Tiwari	STTP on Computer Programming (BMWCS101.1x) conducted by IIT Bombay in blended mode  (under MHRDs NMEICT Project),2015	
Dr. Akhilesh Tiwari	Participated in a <b>Two- week ISTE</b> STTP on Introduction to Design of Algorithms conducted by IIT Kharagpur,2015	National
Dr. Akhilesh Tiwari	National Workshop on Innovations in Teaching & Research Methods (under QIP Scheme of AICTE), 2015	National
Dr. Akhilesh Tiwari	Training of MATLAB on different components (Simulink, Statistical, Optimization, Signal Processing),2014	National
Dr. Akhilesh Tiwari	<b>Participated in a Two week ISTE</b> Coordinators workshop on “Cyber Security” under MHRDs National Mission on Education through ICT (NMEICT), Govt. of India  (Continuing Education & Quality Improvement Programme (CE & QIP),2014	National
Dr. Akhilesh Tiwari	Participated in a <b>Two week ISTE</b> workshop on “Computer Networking” under MHRDs National Mission on Education through ICT (NMEICT), Govt. of India, 2014	National
Dr. Akhilesh Tiwari	Training program on MATLAB Fundamentals conducted by MathWorks, 2014	National
Dr. Akhilesh Tiwari	Participated in a <b>Two Week ISTE</b> Workshop on Signals & Systems Conducted by IIT Kharagpur under NMEICT (MHRD), 2014	National
Dr. Sanjiv Sharma	Attended Faculty Development Program on “Promoting Quality in Higher Technical Education” Conducted by IITM Gwalior, 18	National

	- 22 January 2016.	
Dr. Sanjiv Sharma	Attended Faculty Development Program on “Agile Methodology” Conducted by Infosys at Maharashtra Institute of Technology Aurangabad, 21st to 25th Dec 2015.	National
Dr. Sanjiv Sharma	Attended “ISTE Workshop on Introduction to Design of Algorithm” under the National Mission on Education through ICT MHRD, Conducted by IIT Kharagpur, 27 April- 30 May 2015.	National
Dr. Sanjiv Sharma	Attended and member of organizing committee “National workshop” on “Innovation in Teaching & Research Methods” conducted and organized at MITS Gwalior.25-26 March 2015.	National
Dr. Sanjiv Sharma	Attended “National Faculty Development Program”, course on “Educational Resource Planning System” conducted and organized at IIITM Gwalior, 7-8 Feb 2015.	National
Dr. Sanjiv Sharma	Attended “ISTE Workshop on Cyber Security” under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 10-20 July 2014.	National

Dr. Sanjiv Sharma	Attended “ISTE Workshop on Computer Networking” under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 30 June-5 July 2014.	National
Dr. Sanjiv Sharma	Attended “National Faculty Development Program”, course on “pedagogical approaches for technical education” conducted and organized at IIITM Gwalior, 3-8 May 2014.	National
Dr. Sanjiv Sharma	Attended “ISTE Coordinators Workshop on Computer Programming” under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 21st to 26th April 2014.  Attended “AICTE recognized Workshop on Mobile adhoc network” conducted by NITTTR Chandigarh, 3- 7 March 2014.	National
Prof. Abhilash Sonker	One-day National Workshop on Intellectual Property Rights & Patents  Madhav Institute of Technology and Science  04 <sup>th</sup> February 2017	National
Prof. Abhilash Sonker	Workshop on Quality in Technical Education: A Challenge MITS, Gwalior	National

	2016	
Prof. Abhilash Sonker	ISTE Workshop on Signal & System Conducted By IIT Kharagpur,2014	National
Prof. Abhilash Sonker	Teaching & Research Methodology Organized By QIP Centre MITS Gwalior, 2014	National
Prof. Abhilash Sonker	ISTE Workshop on Computer Networking Conducted By IIT Bombay,2014	National
Prof. Abhilash Sonker	ISTE Workshop on Cyber Security Conducted By IIT Bombay, 2014	National
Prof. Abhilash Sonker	Two Day Conclave on Electrical Science,2015	National
Prof. Abhilash Sonker	Innovation In Teaching & Research Methodology Under QIP Scheme,2015	National
Prof. Abhilash Sonker	ISTE Sttp on Introduction To Design of Algorithms Conducted By IIT Bombay,2015	National
Prof. Amit manjwar	Workshop on New Paradigm in Software Engineering Software Engineering Accenture MITS Gwalior 2017	National
Prof. Amit manjwar	National Workshop on Intellectual Property Rights & Patents Intellectual Property IET MITS Gwalior 2017	National
Prof. Amit	Faculty Enablement Program Infosys Campus Connect	National



manjhar	Program Foundation Program Infosys Mits Gwalior 2017	
Prof. Amit manjhar	National Workshop on Quality in Technical Education: A Challenge Technical Education MITS Gwalior 2016	National
Prof. Amit manjhar	TEQIP-II Sponsored Faculty Development Program on Effective Teaching and Pedagogical Practices, Organized by the Centre for Educational Technology, IIT Kharagpur from 9th Oct to 11th Oct 2015.	National
Prof. Jaimala Jha	Attended Two week ISTE workshop on Introduction to Design of Algorithm Conducted by IIT Kharagpur, during, 27 April- 30 May 2015 at MITS.	National
Prof. Jaimala Jha	Attended Two week ISTE workshop on Cyber Security Conducted by IIT Bombay, during, 10 July to 20 July 2014 at MITS.	National
Prof. Jaimala Jha	Attended National Workshop Innovation in teaching & Research Methods 25March to 26 March 2015, during at MITS.	National
Prof. Jaimala Jha	Attended National Workshop on Cloud Computing conducted by IBM India, during,13 May to 15	National

	May 2014 at MITS.	
Prof. Jaimala Jha	Attended National Conference on Emerging trends in Communication, Control, and Networking”, during, 1 Feb. to 2 Feb. 2014 at MITS.	National
Prof. Jaimala Jha	Attended Two day National Workshop on Quality Technical Education A Challenge conducted by MITS 18-19 Nov. 2016	National
Prof. Jamvant Singh Kumare	Two Days National Workshop Quality in Technical education: A Challenge MITS Gwalior 18-19 Nov, 2016	National
Prof. Jamvant Singh Kumare	Workshop of Developing android applications for fun and profit,2015	National
Prof. Jamvant Singh Kumare	National workshop on Innovations in Teaching and research methods, 2015	National
Prof. Jamvant Singh Kumare	Summer school on Wireless Networks: Research Issues & Applications , 2014	National
Prof. Jamvant Singh Kumare	ISTE Workshop on Cyber Security conducted by IIT Bombay,2014	National

Prof. Jamvant Singh Kumare	ISTE Workshop on Computer Networking conducted by IIT Bombay,	National
Prof. Jamvant Singh Kumare	Two –Days Workshop on Applications of GIS & Remote Sensing in Engineering,2014	National
Prof. Jamvant Singh Kumare	Two-week ISTE Workshop on Signals & Systems conducted by IIT Kharagpur, 2014	National
Prof. Mahesh Parmar	Two-days National Workshop  Quality in Technical Education: A Challenge  Madhav Institute of Technology and Science  18 <sup>th</sup> – 19 <sup>th</sup> Nov2016	National
Prof. Mahesh Parmar	One-day National Workshop  Intellectual Property Rights & Patents  Madhav Institute of Technology and Science  04 <sup>th</sup> February 2017	National
Prof. Mahesh Parmar	Two-day National Workshop on “Quality in Technical Education: A Challenge” Organized by Madhav Institute of Technology and Science, from 18th – 19th Nov2016.	National
Prof. Mahesh Parmar	Global Initiative for Academic Networks (GIAN) course on “Neural Networks Learning Theory – Advanced Topics”, Organized by IIT Indore, from	National

	06th July to 15th July 2016.	
Prof. Mahesh Parmar	Seven days Workshop on “Developing Android Applications for Fun & Profit”, Organized by Electronics and ICT Academy, PDPM IIITDM, Jabalpur, from 14th Dec to 20th Oct 2015.	National
Prof. Mahesh Parmar	TEQIP-II Sponsored Faculty Development Program on Effective Teaching and Pedagogical Practices, Organized by the Centre for Educational Technology, IIT Kharagpur from 9th Oct to 11th Oct 2015.	National
Prof. Neha Bhardwaj	Workshop on Signal & system by IITKgh : 2-12 jan2014	National
Prof. Neha Bhardwaj	Matlab training: 21-22 jan 2014	National
Prof. Neha Bhardwaj	Pedagogy training: 3-8 may 2014	National
Prof. Neha Bhardwaj	Workshop on Cloud Computing: 13-15may 2014	National
Prof. Neha Bhardwaj	ISTE Workshop on Computer Programming by IITB: 16	National
Prof. Punit Kumar Johari	Conference Teaching Competence International Conference ICCD-2016 Privacy Preserving infrequent item sets mining using GA	National

	approach IIMT, Bhubaneswar 14 <sup>th</sup> August, 2016	
Prof. Punit Kumar Johari	Teaching Competence Neural Networks Learning Theory-Advance Topics Neural Networks Institution IIT, Indore 6-15 July 2016	National
Prof. Punit Kumar Johari	Cyber World and its related Crime Security  25 Feb 2016  MITS GWALIOR	National
Prof. Punit Kumar Johari	National Conference on Advances in Information and Communication 2016  4 <sup>th</sup> to 5 <sup>th</sup> Feb 2016  MITS GWALIOR	National
Prof. Punit Kumar Johari	Application of Optimization Techniques for Engineering & Technology  23-27 March 2015  MITS GWALIOR	National
Prof. Punit Kumar Johari	Introduction to Design of Algorithm  27 April- 30 May 2015  MITS GWALIOR	National
Prof. Punit Kumar Johari	Innovation in Teaching & Research Methods  25-26 March 2015  MITS GWALIOR	National
Prof. Punit Kumar	Foundation Program 4.0	National

Johari	5 <sup>th</sup> to 9 <sup>th</sup> Jan 2015  SGI, Atigre, Kolhapur, Maharashtra	
Prof. Punit Kumar Johari	Mobile App Development  14 <sup>th</sup> to 18 <sup>th</sup> July 2014.  Shri Ramdeobaba College of Engineering and Management, Nagpur, Maharashtra	National
Prof. Punit Kumar Johari	Workshop on Computer Networking  30 June-5 July 2014.  MITS GWALIOR	National
Prof. Punit Kumar Johari	Cloud Computing  13 <sup>th</sup> -15 <sup>th</sup> May 2014  MITS GWALIOR	National
Prof. Punit Kumar Johari	TEQIP MIS  10 <sup>th</sup> and 11 <sup>th</sup> March 2014  VJIT, Mumbai	National
Prof. Punit Kumar Johari	pedagogical approaches for technical education  3-8 May 2014  IIITM Gwalior	National
Prof. Punit Kumar Johari	Computer Programming  21st to 26th April 2014  MITS GWALIOR	National
Prof. Punit Kumar	Signals & Systems  2nd to 12th January 2014  MITS GWALIOR	National

Johari		
Prof. Rajiv K. Singh	<p><b>Signal &amp; System</b>” held under National Mission on Education through ICT (MHRD, Govt. of India)</p> <p>IIT Kharagpur</p> <p>02/01/2014</p> <p>12/01/2014</p>	National
Prof. Rajiv K. Singh	<p><b>MATLAB Training Program</b></p> <p>Sponsored by TEQIP -II</p> <p>MITS, Gwalior (M.P.)</p> <p>21-22 January 2014 ,</p> <p>25-28 March 2014</p>	National
Prof. Rajiv K. Singh	<p>Coordinator’s Workshop on <b>Computer Networking</b></p> <p>IIT Bombay</p> <p>05/05/2014</p> <p>09/05/2016</p>	National
Prof. Rajiv K. Singh	<p><b>“Computer Networking”</b> conducted under the National Mission on Education through ICT by MHRD, Govt. of India</p> <p>IIT Bombay</p> <p>28/05/2014</p> <p>05/07/2014</p>	National
Prof. Rajiv K. Singh	<p><b>Faculty Enablement Program (FEP) on Foundation Program 4.0</b> Under Infosys Campus Connect Program.</p> <p>Infosys</p> <p>05/01/2015</p>	National

	09/01/2015	
Prof. Rajiv K. Singh	<b>Analysis Design and Algorithms</b> conducted under the National Mission on Education through ICT by MHRD, Govt. of India  IIT Kharagpur  27/04/2015  30/05/2015	National
Prof. Rajiv K. Singh	<b>Faculty Enablement Program (FEP) on Software Testing</b>  Infosys  04/01/2016  08/01/2016	National
Prof. Rajiv K. Singh	<b>Research Methodology</b> ” sponsored by AICTE, New Delhi  MITS, Gwalior (M.P.)  28/03/2014  29/2014	National
Prof. Rajiv K. Singh	<b>Recent Trends in Software Testing (RTST- 2014)</b>  NIT , Rourkela  12/05/2014  14/05/2014	National
Prof. Rajiv K. Singh	<b>Innovation in Teaching &amp; Research Methods</b>  Under QIP scheme  MITS, Gwalior (M.P.)  25/03/2015  26/03/2015	National
Prof. Rajiv K. Singh	<b>Applied Computing</b> under QIP  MITS, Gwalior (M.P.)	National



	29/03/2016  ----	
Prof. Rajiv K. Singh	<b>Control System and Current Applications</b>  Under TEQIP-II  IIT Gandhi Nagar  26/10/2016  27/10/2016	National
Prof. Rajni Ranjan Makwana	Workshop on “Network Enumeration and Security” (WNES-2014) organized by Department of CSE under TEQIP at NIT Bhopal during 20-22 Jan 2014.	National
Prof. Rajni Ranjan Makwana	Workshop on “Energy Management in Smart Grid Through Soft Computing” (WEMSG-2014) organized by Department of Electrical Engineering under TEQIP at NIT Bhopal during 13-15 feb. 2014.	National
Prof. Rajni Ranjan Makwana	Short Term Training Program on “Network Forensics” organized by Department of CSE under ISEA project Govt. of India at NIT Bhopal during 5-6 march 2014.	National
Prof. Rajni Ranjan Makwana	Attended TEQIP Conclave organized by IIT Gandhinagar during sep. 24-25 2016	National
Prof. Rajni Ranjan	Attended Two-Day National workshop on “Quality in	National

Makwana	Technical Education: A challenge” during 18th-19th November ,2016.	
Prof. Rajni Ranjan Makwana	Workshop on Intellectual property rights & patents patents MITS Gwalior 2017	National
Prof. Vikas Sejwar	Workshop on Intellectual property rights & patents patents MITS Gwalior 2017	National
Prof. Vikas Sejwar	Workshop on Quality in Technical Education: A Challenge Teaching Education MITS Gwalior 2016	National
Prof. Vikas Sejwar	Workshop on Applied Computing Computing MITS Gwalior 2016	National
Prof. Vikas Sejwar	Signals & Systems  Gwalior, Two weeks (02-12 Jan 2014) IIT Kharagpur, ISTE	National
Prof. Vikas Sejwar	Computer Networking Gwalior  Two weeks (30 June-05 July 2014) IIT Bombay,ISTE	National
Prof. Vikas Sejwar	Cyber Security Gwalior  Two weeks (10-20 July 2014)  IIT Bombay, ISTE	National
Prof. Vikas Sejwar	Pedagogical Approaches in Technical Education	National

	Gwalior 03-08 May 2014 IITM Gwalior	
Prof. Vikas Sejwar	Cloud Computing Gwalior 13-15 May 2014 MITS Gwalior	National
Prof. Vikas Sejwar	Applied Computing Gwalior 29 March 2016 MITS, Gwalior	National
Prof. Nishtha Parasha	Attended one day National workshop on “Cyber Forensics: Tools and Techniques”, in MITS Gwalior, February 2017.	National
Prof. Nishtha Parasha	Attended one day workshop on “Intellectual Property Rights and Patents”, in MITS Gwalior, January, 2017.	National
Prof. Nishtha Parasha	Attended International Conference on Communication Systems and Network Technologies, IEEE CSNT-2016, Chitkara University, Chandigarh, March 2016	National
Prof. Nishtha Parasha	Attended Workshop on Applied Computing organized by Department of Computer Applications on 29 March, 2016 Under Quality Improvement Program (QIP), MITS Gwalior.	National
Prof. Nishtha Parasha	Attended National Workshop on Research Methodology, Madhav Institute of Technology & Science, Gwalior, January 2016.	National
Prof. Vishakha Agarwal	Attended International Conference on Communication Systems and Network Technologies, IEEE CSNT-	National

	2015, SRCCEM, Gwalior, April 2015.	
Prof. Vishakha Agarwal	Attended National Workshop titled 'Research Methodology' at MITS, Gwalior in January, 2016.	National
Prof. Vishakha Agarwal	Attended 3rd National Conference on 'Advances in Information and Communication Technology' at MITS, Gwalior in February, 2016.	National
Prof. Vishakha Agarwal	Attended Workshop titled 'Cyber World and its Related Crimes' at MITS, Gwalior in February, 2016.	National
Prof. Vishakha Agarwal	Attended 10th International Conference on 'Advanced Computing & Communication Technologies' -Springer at APIIT SD, Panipat in November, 2016.	National
Prof. Vishakha Agarwal	Attended one day workshop on "Intellectual Property Rights and Patents", in MITS Gwalior, January, 2017.	National
Prof. Vishakha Agarwal	Attended one day National workshop on "Cyber Forensics: Tools and Techniques", in MITS Gwalior, February 2017.	National
Prof. Pooja Mishra	Attended National Workshop titled 'Research Methodology' at MITS, Gwalior in January, 2016.	National
Prof. Pooja Mishra	Attended 3 <sup>rd</sup> National Conference on 'Advances in Information and Communication Technology' at MITS, Gwalior in February, 2016.	National
Prof. Pooja Mishra	Attended Workshop titled 'Cyber World and its Related Crimes' at MITS, Gwalior in February, 2016.	National

Prof. Pooja Mishra	Attended one day workshop on “Intellectual Property Rights and Patents”, in MITS Gwalior, January, 2017.	National
Prof. Pooja Mishra	Attended one day National workshop on “Cyber Forensics: Tools and Techniques”, in MITS Gwalior, February 2017.	National
Prof. Abhishek Dixit	Attended International Conference on Electrical, Electronics & Optimization Techniques IEEE ICEEOT-2015, DMI College of engineering, Chennai, Tamil Nadu, March 2016.	National
Prof. Abhishek Dixit	Attended two days Faculty Development Program on “Wireless sensor network and cloud computing”, in ITM Universe Gwalior, June, 2012.	National
Prof. Abhishek Dixit	Attended one day workshop on “Ethical Hacking”, in NRIITM Gwalior, May, 2009.	National
Prof. Somya Agarwal	3rd International Conference on Public Mental Health and Neuroscience (ICPMN-2016), Sarvasumana Association, Bangalore, Karnataka, December 2016	National
Prof. Somya Agarwal	Web Designing (Robosapiens Pvt. Limited in association with IIT Delhi)	National
Prof. Somya Agarwal	Metasploit (Hack Planet in association with Institute of Technology and management Gwalior)	National
Prof. Somya Agarwal	Cyber forensics and Power Searching ( Institute of Technology & Management, Gwalior)	National
Prof. Somya	National Seminar on “Role of	National

Agarwal	Information Technology in wireless network and cyber forensic"( Institute of Technology & Management, Gwalior)	
Prof. Namrata Agrawal	Attended one day National workshop on "Cyber Forensics: Tools and Techniques", in MITS Gwalior, February 2017.	National
Prof.Namrata Agrawal	Attended one day workshop on "Intellectual Property Rights and Patents", in MITS Gwalior, January, 2017.	National

Event Organised in the department

S.No.	Programme	Title of Programme	Dates	Sponsored by
1.	National workshop	Renewable Energy based Power Generation: Options and Challenges	14 <sup>th</sup> Sept 2013	TEQIP-II
2.	Short Term Training Programme	"Nature Inspired Optimization Techniques for Engineering Applications	2 <sup>th</sup> -6 <sup>th</sup> December 2013	TEQIP-II
3.	National Conference	Innovations in Electrical Engineering	22 <sup>nd</sup> February 2014	TEQIP-II
4.	National Conference	Innovations in Electrical Engineering	10 <sup>th</sup> -11 <sup>th</sup> February 2015	TEQIP-II
5.	National workshop	Software tools for Industrial drives & Instruments	24 <sup>th</sup> March 2015	TEQIP-II
6.	Short Term Training	Simulation of Power Electronics Converters	12 <sup>th</sup> -16 <sup>th</sup> May, 2015	TEQIP-II
7.	Short Term Training	Recent Advances in Electrical Engineering	1 <sup>st</sup> -5 <sup>th</sup> March	TEQIP-II

	Programme		2016	
8.	National Seminar	Renewable Energy and Microgrid	16 <sup>th</sup> March 2016	TEQIP-II
9.	National Conference	Innovation in Electrical Engineering	17 <sup>th</sup> March 2016	TEQIP-II
10.	National workshop	Renewable Energy: Opportunities & Challenges	06 <sup>th</sup> Sept. 2016	TEQIP-II
11.	National Conference	Innovation in Electrical Engineering	07 <sup>th</sup> Sept. 2016	TEQIP-II
12.	One day National workshop	Smart Grid Technologies	6 <sup>th</sup> Feb.2017	TEQIP-II
13.	National Conference	Innovation in Electrical Engineering	14 <sup>th</sup> Feb.2017	TEQIP-II
14.	National Seminar	Solar & wind Technologies	15 <sup>th</sup> Feb.2017	TEQIP-II

Program attended by faculty member

<b>Name of the faculty</b>	<b>Seminars/ Conferences/Workshops/STTP attended</b>	<b>The source of funding (national/international)</b>
Dr Manjaree Pandit	Workshop	TEQIP-II
Dr Laxmi Srivastava	Symposium on Electrical Science Conclave	TEQIP-II
Dr Manjaree Pandit	Symposium on Electrical Science Conclave	TEQIP-II
Prof. Praveen Bansal	Symposium on Power Electronics and Electrical Machines	TEQIP-II
Prof. Vishal Chaudhary	Symposium on Power Electronics and Electrical Machines	TEQIP-II
Prof. Vijay Kumar Tewari	Symposium on Power Electronics and Electrical Machines	TEQIP-II
Prof. Rakesh	Symposium on Power Electronics and	TEQIP-II

Narvey	Electrical Machines	
Prof. Hari Mohan Dubey	Symposium on Power Electronics and Electrical Machines	TEQIP-II
Prof. Saket Gupta	Training Program	TEQIP-II
Prof. Hari Mohan Dubey	Two week Short Term Course	QIP
Prof. Shishir Dixit	Two week Short Term Course	QIP
Prof. H.Singh Ahirwar	Two week Short Term Course	QIP
Prof. Vishal Chaudhay	Two week Short Term Course	QIP
Prof. Vijay Kumar Tewari	Two week Short Term Course	QIP
Rakesh Narvey	Two week Short Term Course	QIP
Prof. H.S. Ahirwar	Two week Short Term Course	QIP
Prof. Vishal Chaudhary	Two week Short Term Course	QIP
Prof. Vijay Kumar Tewari	Two week Short Term Course	QIP

ARCH

*Dr. R.K. Pandit*

1. Organized and Convened “**National Seminar on Infrastructure Management Challenges and Advancements**” sponsored by AICTE, New Delhi, 2<sup>nd</sup> and 3<sup>rd</sup> May 2011.
2. Organized and Convened National Workshop on “**Quality Assurance in Technical Education**” sponsored by MPCOST, Bhopal 6<sup>th</sup>& 7<sup>th</sup> February 2010.
3. Organized and Convened National Workshop on “**Quality Management in Technical Education**” sponsored by AICTE, New Delhi, 6<sup>th</sup>& 7<sup>th</sup> March 2009.
4. Organized and Convener National Workshop on “**Quality Management in Technical Education**” sponsored by AICTE, New Delhi, 16<sup>th</sup>& 17<sup>th</sup> February 2008.



5. Organized and Convened National Seminar on “**Infrastructure Management for New World Order (Technology, Techniques & Systems)**” sponsored by AICTE, New Delhi & MPCOST, Bhopal , 28<sup>h</sup>& 29<sup>th</sup> December 2007.
6. Organized Workshop on “**Urban Management**” sponsored by Govt. of MP, Bhopal, 15<sup>th</sup> December 2007.
7. Organized and Convened “**National Seminar on Infrastructure Management for New World Order and Systems**” sponsored by AICTE, New Delhi, 24<sup>th</sup>& 25<sup>th</sup> March 2006.

b)International

S.No	STTP, Workshops, seminars, conferences	Topic	Date	Duration
01	STTP	“Recent Trends in Building Services For Architecture And Construction Engineering	27 Feb. to 09 th March 2017	2 Weeks
02	STTP	“Infrastructure Development”	15 March to 27 March 2017	2 Weeks

**HUMANTIES- NIL**

**APPLIED –**

a) National - Total 06

Events Organized in the Department:

1. Organised one day Workshop on ‘**Engineering Trends in Materials for Engineering Applications**’ Under *TEQIP Phase II* on August 09, 2014 at MITS, Gwalior .
2. Organised Two days National Conference on ‘**Advanced in Mathematical Applications for Engineering & Technology**’ in December 20-21, 2014 Under *TEQIP II* at department of Applied Science, MITS, Gwalior

3. Organised One days National Conference on '*Chemistry for Life*' in February 28, 2015 Under TEQIP II at department of Applied Science, MITS, Gwalior.
  4. Organised one week short term training programme on '*Applications of Optimization Techniques for Engineering and Technology*' under TEQIP Phase II during November, 23-27, 2015 at Dept. of Applied Science, MITS, Gwalior .
  5. Organised a 2<sup>0th</sup> Annula Conference of Gwalior Academy of Mathmatical Sciences and Symposium on '*Mathematics in Real Life Problems with Special Reference to Life Sciences*' during February 5-7, 2016 at Dept. of Mathematics, Jiwaji University, Gwalior as *Joint Oorganizing Secretary* of the Programme by Dr. D.K. Jain
  6. **organized** a one day Symposium on 'Novel and Smart Materials & Devices: Paradigm for Fabrication & Characterization' Under TEQIP II Organised by Department of Applied Science, Madhav Institute of Technology & Science Gwalior on March 05, 2016.
- b) International                      NIL
- c) Faculty attended seminar/ conference/STTP/ workshops etc. in 2016-17
- **Dr. Abhay Mishra, Dr. Vikas Shinde, Dr. D K Jain, Angad Ojha, Jitendra Kumar, Dr. Anjula Gaur, Dr. S Bhattacharya, Dr. Uday Pratap Singh, D K Mishra, Dr. Preeti Gupta & Shweta Shrivastava:** organized and Attended one day Symposium on 'Novel and Smart Materials & Devices: Paradigm for Fabrication & Characterization' Under TEQIP II Organised by Department of Applied Science, Madhav Institute of Technology & Science Gwalior on *March 05, 2016.*
  - **Dr. D. K. Jain:** Attended TWO WEEKS Faculty Development Programme (Technical Teacher's Training Programme TTTP) in Entrepreneurship sponsored by NSTEDB, Department of Science & Technology New Delhi. Organized by Entrepreneurship Development Cell, Madhav Institute of Technology & Science Gwalior from **02/01/ 2016 to 14/01/ 2016.**
  - **Dr. Vikas Shinde & Dr. S. Bhattacharya** attended a two day Symposium on Data Language & Machine Learning at IIT Gandhinagar (24<sup>th</sup>-25<sup>th</sup> Oct 2016) under TEQIP II
  - **Jitendra Kumar:** Attended Two Weeks Faculty Development Programme in Entrepreneurship Development (TTTP) held from 02-14, January 2016. The Programme was sponsored by NSTEDB & DST Govt. of India, New Delhi, in under EDC, Madhav Institute of Technology & Science, Gwalior.
  - **Jitendra Kumar :** Attended One week STC on "Mathematical Analysis & Applications" under QIP held on 04/07/2016 -08/07/2016 organized by Department of Mathematics IIT Roorkee.

- **Dr. Abhay Mishra, Dr. Vikas Shinde, Dr. D. K. Jain, Angad Ojha, Jitendra Kumar, D K Mishra, Dr. Peeti Gupta, Dr, Tanushkha Parashar & Shweta Shrivastava:** attended a two days National Workshop on Quality Technical Education: A Challenge (18<sup>th</sup>-19<sup>th</sup> Nov. 2016) under TEQIP II at MITS Gwalior
- **Dr. Vikas Shinde, Dr. D K Jain, Angad Ojha, Jitendra Kumar, D K Mishra & Shweta Shrivastava** Attended On day Workshop on ‘Applied computing’ sponsored by QIP, AICTE. Organised by Department of Computer Application, Madhav Institute of Technology & Science Gwalior on *29<sup>th</sup> March 2016.*
- **Dr. Vikas Shinde & Dr. D. K. Jain** Attended Two days Workshop on ‘Finite Element Method for Engineers’ Under TEQIP Phase II, Organised by Department of Mechanical Engineering, Madhav Institute of Technology & Science Gwalior on **01<sup>st</sup> and 02<sup>nd</sup> April, 2016.**
- **Dr. Vikas Shinde, Dr. D K Jain, Angad Ojha, Dr. Anjula Gaur, D K Mishra, Dr. Preeti Gupta & Shweta Shrivastava:** Attended two Weeks AICTE sponsored short term course under QIP on Environmental Engineering and practices at Department of civil engineering MITS, Gwalior on March 08-18, 2016.
- **Dr. Vikas Shinde:** Attended STC on “Numerical methods for engineers, research and IT Community” under QIP held on 04/07/2016 to 09/07/2016 organized by PDPM IITDM Jabalpur.
- **Dr. D. K. Jain and Shewta Shrivastava :** Attended 20<sup>th</sup> Annual National Conference of Gwalior Academy of Mathematical science and symposium on mathematics in real life problems with special reference to life sciences, sponsored by UGC and NBHM at SOMAAS, Jiwaji University, Gwalior, Feb 05-07 2016
- **Dr. Abhay Mishra:** Attended three day workshop on Quality initiatives in technical & Higher Educational Institutes in Engineering staff- college of India (ESCI) at Hyderabad from 03-05, May 2016.
- **Dr. Vikas Shinde, Dr. Anjula Gaur, Dr. S Bhattacharya:** Attended two weeks STC on “Quality Enhancement of Teaching- Learning Processes” AICTE sponsored Two Week STC organized by Madhav Institute of Technology & Science, Gwalior, on 27 February 2017 to 09 **March 2017.**
- **Dr. D. K. Jain and Angad Ojha:** Attended One week FDP on “Innovative Trends in Computing Technology & Engineering” Under TEQIP Phase-II

held at the Department of Computer Science and Information Technology, MITS Gwalior (M.P.) during **21<sup>st</sup> – 25<sup>th</sup> March 2017.**

- **Dr. Abhay Mishra, Dr. Vikas Shinde, Dr. D K Jain, Angad Ojha, Jitendra Kumar, Dr. Anjula Gaur, Dr. S Bhattacharya, Dr. Uday Pratap Singh:** Attended one day workshop on Intellectual Property Rights and Patents under TEQIP-II, Feb 4, 2017, at MITS, Gwalior.
- **Jitendra Kumar:** Attended STC on “Writing Academic Publications” under TEQIP-II held on March 16-18 2017 organized by IIT Gandhinagar, Gujarat.

## 21. Student profile course-wise

Biotech

Name of the course	Applications Reviewed	Selected		Pass Percentage	
		Male	Female	Male	Female
B.E. Program	Students selected by JEE	24	16	66.7%	93.8%
M.Tech Program	--	0	6	Result Awaited	Result Awaited

### MECHANICAL

Name of the course / Programme (refer question no. 2)	Application received	Academic year	Selected		Pass percentage	
			Male	Female	Male	Female
B.E.	NA	2014-15	40	34	85	94.11
	NA	2015-16	54	17	100	94.11
	NA	2016-17	109	31	96.33	96.77
M. Tech.	NA	2014-15	23	05	78.26	100
	NA	2015-16	18	00	88.89	00
	NA	2016-17	13	04	76.92	100

Chemical

Academic Year	Date	Name of the conference / workshop / seminars	Source of funding (national / international) / Name of funding agency
2013-14	21 <sup>st</sup> – 25 <sup>th</sup> October	Short Term Training Programme (STTP) on “Advances in Chemical Engineering”	TEQIP -II
2013-14	14 <sup>th</sup> -15 <sup>th</sup> January	Workshop on “Computational Fluid Dynamics”	TEQIP -II
2014-15	9 <sup>th</sup> February	Seminar on “Recent Advances in Solar Energy”	TEQIP -II

2015-16	29 <sup>th</sup> February	Seminar on “Recent Trends in Waste Water Treatment”	TEQIP -II
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MCA

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage
		*M	*F	
MCA(2016)	N/A	22	22	95%

Elex.:

Name of the course	Application received	selected		Pass percentage	
		Male	Female	Male	Female
BE – EC I year	126	93	33		
BE – ET I year	60	45	15		
ME -CCN	25	12	13		
M.Tech- MW	17	07	10		

Civil

Name of the Course/Programme	Applications received	Selected		Enrolled		Pass percentage	
		Male	Female	Male	Female	Male	Female
B.E. Civil Engineering – First Year	N.A.	N.A.	N.A.	107	21	N.A.	N.A.
- Second Year	N.A.	N.A.	N.A.	111	36	N.A.	N.A.
- Third Year	N.A.	N.A.	N.A.	99	35	N.A.	N.A.
- Final Year	N.A.	N.A.	N.A.	46	18	N.A.	N.A.
M.E. Construction Technology & Management – First Year	N.A.	N.A.	N.A.	22	03	N.A.	N.A.
- Second Year	N.A.	N.A.	N.A.	16	01	N.A.	N.A.
M.Tech Environmental Engineering – First Year	N.A.	N.A.	N.A.	05	04	N.A.	N.A.
- Second Year	N.A.	N.A.	N.A.	05	01	N.A.	N.A.
M.E. Structural Engineering – First Year	N.A.	N.A.	N.A.	06	01	N.A.	N.A.

Name of the Course/Programme	Applications received	Selected		Enrolled		Pass percentage	
		Male	Female	Male	Female	Male	Female
- Second Year	N.A.	N.A.	N.A.	05	00	N.A.	N.A.

CSE/IT

NIL

ARCH- NA

HUMANTIES- NIL

APPLIED –NA

ELECTRICAL

Name of The Course	Application Received	Selected		Pass Percentage	
		Male	Female	Male	Female
BE	77	55	17	97%	98.5%
ME(ISD)	17	8	9	47%	53%
ME(MAC)	10	4	6	75%	60%

## 22. Diversity of Students

Biotech

Name of the course	% of students from the college	% of students from the state	% of students from the States	% of students from other countries
B.E. Biotechnology 2 <sup>nd</sup> to 4 <sup>th</sup> Yr	55%	42.5 %	2.5%	-
M.Tech Final Year	83.3%	-	16.7 %	-

MECHANICAL

Name of course (refer question no. 2)	Academic year	% of students from the state	% of students from other state	% of students from other countries
B.E.	2014-15	89	11	NIL
	2015-16	91	09	NIL
	2016-17	88	12	NIL
M. Tech.	2014-15	85	15	NIL
	2015-16	83	17	NIL

	2016-17	87	13	NIL
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Chemical

Academic Year	Date	Name of the conference / workshop / seminars	Source of funding (national / international) / Name of funding agency
2013-14	21 <sup>st</sup> – 25 <sup>th</sup> October	Short Term Training Programme (STTP) on “Advances in Chemical Engineering”	TEQIP -II
2013-14	14 <sup>th</sup> -15 <sup>th</sup> January	Workshop on “Computational Fluid Dynamics”	TEQIP -II
2014-15	9 <sup>th</sup> February	Seminar on “Recent Advances in Solar Energy”	TEQIP -II
2015-16	29 <sup>th</sup> February	Seminar on “Recent Trends in Waste Water Treatment”	TEQIP -II

MCA

Name of the Course	%of students from the college	%of students from the state	% of students from other States	% of students from other countries
MCA	NIL	100%	-	NIL

Elex:

Name of the course	% of students from the college	% of students from the State	% of students from other states	% of students from other



				countries
BE – EC I year	Nil	95 %	5%	--
BE – ET I year	Nil	95 %	5%	--
ME -CCN	Nil	95 %	5%	--
M.Tech- MW	Nil	95 %	5%	--

Civil

Name of the Course/Programme	% of students from the same state	% of students from other States	% of students from abroad
B.E. Civil Engineering	90 %	10 %	NIL
M.E.	Approx. 75 %	Approx. 25 %	NIL

CSE/IT

NIL

ARCH- NIL

HUMANTIES- NIL

APPLIED – NA

ELECTRICAL

Name of the Course	% of the student from the college	% of the student from the state	% of the student from the other state	% of the student from other country
BE	-	92%	8%	Nil
ME(ISD)	5%	82.4%	17.6%	Nil
ME(MAC)	10%	90	10%	Nil

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?**

Biotech

GATE	Number of Students Cleared
2017	1
2016	5
2015	6
2014	4
2013	14

GATE 2017		
S.No	Name of Student	Marks

1	Dilshad Qureshi	38.35
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<b>GATE 2016</b>		
<b>S.No</b>	<b>Name of Student</b>	<b>Marks</b>
1	Swati Rajput	41.33
2	Dheeraj Arya	18.67
3	Manjyot Kaur	30.67
4	Bhanu Jaseja	28.33
5	Ambika Sharma	34

<b>GATE 2015</b>		
<b>S.No</b>	<b>Name of Student</b>	<b>Marks</b>
1	Anirudh Singh	38
2	Palash Khandelwal	31.33
3	Bhanu Jaseja	26.33
4	Tullika Mukharjee	26.33
5	Ambika Sharma	33

<b>GATE 2014</b>		
<b>S.No</b>	<b>Name of Student</b>	<b>Marks</b>
1	Bhanu Jaseja	26.33
2	Diksha jain	36.33
3	Abhishek Shrivastava	38.33
4	Prashant Jha	36.33

<b>GATE 2013</b>		
<b>S.No</b>	<b>Student</b>	<b>Marks</b>
1	Dhawal Tailang	53
2	Upadhi Shukla	41
3	Manisha Shukla	50.33
4	Aditya Nagori	42
5	Ankit Gupta	44
6	Abhilash Tiwari	42.33
7	Akash Pawar	42
8	Prashant Soni	50
9	Anandi Kavimandan	40.67
10	Shilpi Gupta	49.6
11	Nidhi Raj Yadav	44.67
12	Rajni Karoriya	30.67
13	Smriti Verma	42.33
14	Bhavana Soni	40

Chemical

<b>Academic Year</b>	<b>Date</b>	<b>Name of the conference /</b>	<b>Source of funding (national / international) /</b>

		<b>workshop / seminars</b>	<b>Name of funding agency</b>
2013-14	21 <sup>st</sup> – 25 <sup>th</sup> October	Short Term Training Programme (STTP) on “Advances in Chemical Engineering”	TEQIP -II
2013-14	14 <sup>th</sup> -15 <sup>th</sup> January	Workshop on “Computational Fluid Dynamics”	TEQIP -II
2014-15	9 <sup>th</sup> February	Seminar on “Recent Advances in Solar Energy”	TEQIP -II
2015-16	29 <sup>th</sup> February	Seminar on “Recent Trends in Waste Water Treatment”	TEQIP -II

### List of Gate Qualified Students (2016)

L i s t o f G R E / T	S.N O.	Name of Students	Marks	Gate Score	All India Rank
	1.	Rahul kumar Dwivedi	45.71	367	2393
	2.	Yogita Sharma	45.01	358	2528
	3.	Roshani Somankar	44.7	354	2548
	4.	Nidhi Sharma (2016 Pass Out)	60.03	552	799
	5.	Chirag Gupta (2016 Pass Out)	59.35	543	856
	6.	Abhishek Sharma (2016 Pass Out)	51.03	436	1678
	7.	Mayank Patil (2016 Pass Out)	43.7	341	2702

OEFL Qualified Students

- Aditya Chaudhary
- Sandeep Singh Tomar
- Aditya Jindal
- Akshar Pandey
- Namit Tripathy
- Parag Saxena

List of GMAT / TOEFL Qualified Students

- Abha Dwivedi

MCA : 08

Elex

<b>Details of Achievements</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>
Success in competitive exam GATE/ NET/ SLET	25	15	16	15	16
Higher Studies	02	03	02	02	07

MECHANICAL

<b>Competitive examinations</b>	<b>Year</b>	<b>Students cleared</b>
GATE	2014-15	22
	2015-16	32
	2016-17	27

Civil

### **GATE – 2017**

S.No.	Name	Gate Score
1	Paras Bansal	977
2	Arpit Kushwah	751
3	Shubham Rai	673
4	Akshat Jain	585
5	Kavya Jain	575
6	Harshit Sharma	564
7	AbhayPratap Singh Bhadoriya	537
8	Gaurav Kushwah	527
9	Ankush Sharma	527
10	Paritosh Gupta	491
11	Pankaj Sharma	451
12	Ashish Sharma	447
13	Manish Bhaskar	347
14	Ravi Godia	249

### **GATE – 2016**

S.No.	Name	Gate Score
1	Deepak Maurya	421

2	Kaushlesh Dangi	603
3	Samay Jain	576
4	Saurav Dangi	710
5	Siddharth Sengar	460
6	Nitesh Shrivastava	674
7	Arvind Singh	464

**PLACEMENTS:**

1.	Ayush Sharma	2016	Wipro
2.	Purvanshi Agarwal	2016	Capgemini
3.	Ayush Sharma	2016	Capgemini
4.	Tanvi Bansal	2016	Capgemini
5.	Purvanshi Agarwal	2016	Accenture
6.	Tanvi Bansal	2016	Accenture
7.	Ayush Sharma	2016	Mahindra Susten
8.	Ajeet Kumar	2016	Mahindra Susten
9.	Abhishek Sharma	2016	Indian Hume Pipe Co. Ltd.
10.	Sourabh Sharma	2016	Indian Hume Pipe Co. Ltd.
11.	Shubhkamna Thakur	2016	Indian Hume Pipe Co. Ltd.
12.	Shashank Singh	2016	Indian Hume Pipe Co. Ltd.
13.	Priyanka	2016	Indian Hume Pipe Co. Ltd.
14.	Sumit Agrwal	2016	Indian Hume Pipe Co. Ltd.
15.	Mrigendra Dubey	2016	Indian Hume Pipe Co. Ltd.
16.	Satindra Singh	2016	Indian Hume Pipe Co. Ltd.

## Civil Services : 05

CSE/IT

Exam Cleared	No of students
<b>GATE</b>	<b>15</b>
<b>CAT</b>	<b>01</b>

### List of GATE Qualified Students in 2017

S.No	Name of Student	Enrolment Number	Course Name	Branch	All India Rank in the exam
1	Deepak Singh Baghel	0901CS131017	B.E.	CSE	6500
2	Alakshendra Singh Yadav	0901CS131009	B.E.	CSE	1822
3	Pranjal Shrivastava	0901CS131042	B.E.	CSE	5024
4	Mukesh Pratap Singh	0901CS131035	B.E.	CSE	4219
5	Sakshi Kushwah	0901CS131053	B.E.	CSE	2913
6	Akanksha Tripathi	0901CS131008	B.E.	CSE	938
7	Rashmi Yadav	0901CS131048	B.E.	CSE	10500
8	Ashutosh Dubey	0901CS131016	B.E.	CSE	6593
9	Ritu Patel	0901CS131049	B.E.	CSE	1922
10	Ashutosh Dubey	0901CS131016	B.E.	CSE	6593
11	Arjun Singh Gurjar	0901CS131014	B.E.	CSE	10000
12	Priyesh Bhardwaj	0901IT131034	B.E.	IT	7521
13	Girraj Rathore	0901IT131017	B.E.	IT	14357
14	Sumit Sharma	0901IT143D11	B.E.	IT	6073
15	Mayank Agrawal	0901IT131025	B.E.	IT	7935

### List of CAT Qualified Students in 2017

S.No.	Name of Student	Enroll No	Course Name	Branch
1	Priyesh Bhardwaj	0901IT131034	B.E.	IT

### ARCH

Performance in Public Examinations					
	UPSC Examinations	SLET	Gate	NET	Others
2014-15	-	-	06	-	-
2013-14	-	-	01	-	-
2012-13	01	-	-	-	-

S.No	Name of Faculty/ Students	Cat/ GATE/CEED	Year	Name of Institute
01	Radhika Ojha	CEED	2016	SPA Delhi
02	Arihant Jain	Gate	2016	Cept Ahamdabad
03	Rishika Shah	Gate	2016	SPA Bhopal
04	Akshaya Revekar			SPA Delhi
05	Kripal S. Bhadouria		2016	SPA Delhi
06	Yogesh Bhardwaj			SPA Delhi
07	Minakshi Gaur			SPA Bhopal
08	Kajal Goyal	Gate		SPA Bhopal
09	Sonal Singh	Gate	2016	SPA Bhopal
10	Nupur Agrawal	GATE	2016	SPA Bhopal



11	Gaurav kaushik			Cept Ahamdabad
12	Rohit Sharma			Cept Ahamdabad
13	Rohan Kale	GATE	2016-17	SPA Bhopal
14	Surbhi Garg		2016-17	Cept, Ahamdabad
15	Rajat Kumar	CAT	2016-17	MANIT, Bhpal

**HUMANTIES- NIL**

**APPLIED- NA**

**ELECTRICAL**

S. No.	Year	No of student registered	No of student			
			Selected in GATE	Selected in CAT	On Campus Selection	Off Campus/Self employed
1	2016-17	72	25	02	52	4
2	2015-16	68	18	10	46	5
3	2013-14	76	07	14	30	32
4	2012-13	77	16	12	34	22

#### **24. Student progression**

Biotech

<b>Student progression</b>	<b>Percentage against enrolled</b>
UG to PG	25
PG to M.Phil	Nil
PG to Ph.D.	10
Ph.D. to Post-Doctoral	Nil
Employed: *Campus Selection	

*Other than campus recruitment	20
	40
Entrepreneurs	10

**MECHANICAL**

Student Progression	Against % enrolled	
UG to PG	16	
PG to M. Phil.	NA	
PG to Ph. D.	17	
Ph. D. to Post – Doctoral	NA	
Employed	UG	PG
Campus Selection	41 %	6 %
Other than campus recruitment	40 %	72 %
Entrepreneurship / Self – employed	3%	5%

**Chemical**

Student Progression	Against % enrolled	
UG to PG	20 %	
PG to M. Phil.	NA	
PG to Ph. D.	NA	
Ph. D. to Post – Doctoral	NA	
Employed	UG	PG
Campus Selection	63.33 %	9.09 %
Other than campus recruitment	3.33 %	90.91 %
Enterpreneurs	-	-

**MCA**

Student progression	Against % enrolled
UG to PG	N/A
PG to M.Phil.	00
PG to Ph.D.	02
Ph.D. to Post-Doctoral	NIL
Employed • Campus selection • Other than campus recruitment	08 (on campus) 07(off campus) Rest are placed through off-campus
Entrepreneurship/Self-employment	02

Elex:

Student Progression	Percentage against enrolled
UG to PG	5 %
PG to M.Phil.	Nil
PG to Ph.D	10%
Ph.D to Post doctoral	NIL
Employed • Campus selection • Other than campus recruitment	52 % 25 % 25%
Enterpreneurs	2 %

Civil

Student progression	Against Percentage enrolled
UG to PG	20 %
PG to M.Phil.	N.A.
PG to Ph.D.	N.A.
Ph.D. to Post-Doctoral	N.A.
Employed • Campus selection	35 % Approx.
• Other than campus recruitment	35 % Approx.
Entrepreneurship / Self - employment	10 % Approx.

CSE/IT

**Placement Details of Students for the Year 2016-2017**

**B.E. CSE / M.Tech CSE / Cyber**

Sl. No.	Name of Student	Year of Passing	Company Name
1.	Aarti Bhadoria	2017	Infosys
2.	Abhinav Jain	2017	Infosys
3.	Abhirup Debnath	2017	Infosys
4.	Anshul Sheoliha	2017	Infosys
5.	Devesh Ojha	2017	Infosys
6.	Diksha Dhanwani	2017	Infosys
7.	Gaurav Shukla	2017	Infosys
8.	Manisha Singhal	2017	Infosys
9.	Pragam Manoj Gandhi	2017	Infosys
10.	Swapnil Singh	2017	Infosys
11.	Vrushali Phaltankar	2017	Infosys
12.	Shivangi Seth M.Tech Cyber	2017	Infosys
13.	Aarti Bhadoria	2017	Accenture
14.	Abhinav Jain	2017	Accenture
15.	Abhirup Debnath	2017	Accenture
16.	Aditya Pandit	2017	Accenture
17.	Akanksha Shrivastava	2017	Accenture
18.	Alakshendra Singh Yadav	2017	Accenture
19.	Anshul Harode	2017	Accenture
20.	Anshul Sheoliha	2017	Accenture
21.	Arjun Singh Gurjar	2017	Accenture
22.	Deepak Singh Baghel	2017	Accenture

23.	Devesh Jha	2017	Accenture
24.	Devesh Ojha	2017	Accenture
25.	Diksha Dhanwani	2017	Accenture
26.	Harsh Bhatia	2017	Accenture
27.	Hridesh Choudhary	2017	Accenture
28.	Lovesh Gupta	2017	Accenture
29.	Manisha Singhal	2017	Accenture
30.	Mansi Saxena	2017	Accenture
31.	Megha Sodani	2017	Accenture
32.	Pragam Manoj Gandhi	2017	Accenture
33.	Pratap Gangwani	2017	Accenture
34.	Prerna Agrawal	2017	Accenture
35.	Rashmi Parashar	2017	Accenture
36.	Ritu Patel	2017	Accenture
37.	Rohit Sharma	2017	Accenture
38.	Sakshi Kushwah	2017	Accenture
39.	Sakshi Sanghi	2017	Accenture
40.	Swapnil Singh	2017	Accenture
41.	Vrushali Phaltankar	2017	Accenture
42.	Abhirup Debnath	2017	Capgemini
43.	Alakshendra Singh Yadav	2017	Capgemini
44.	Anshul Harode	2017	Capgemini
45.	Deepak Singh Baghel	2017	Capgemini
46.	Devesh Ojha	2017	Capgemini
47.	Harsh Bhatia	2017	Capgemini
48.	Lovesh Gupta	2017	Capgemini

49.	Manisha Singhal	2017	Capgemini
50.	Mukesh Pratap Singh	2017	Capgemini
51.	Pragam Manoj Gandhi	2017	Capgemini
52.	Pranjal Shrivastava	2017	Capgemini
53.	Prerna Agrawal	2017	Capgemini
54.	Swapnil Singh	2017	Capgemini
55.	Vrushali Phaltankar	2017	Capgemini
56.	Aarti Bhadoria	2017	IBM
57.	Abhinav Jain	2017	IBM
58.	Akanksha Shrivastava	2017	IBM
59.	Akanksha Tripathi	2017	IBM
60.	Alakshendra Singh Yadav	2017	IBM
61.	Arjun Singh Gurjar	2017	IBM
62.	Ashutosh Dubey	2017	IBM
63.	Devesh Ojha	2017	IBM
64.	Diksha Dhanwani	2017	IBM
65.	Gaurav Shukla	2017	IBM
66.	Harsh Bhatia	2017	IBM
67.	Lovesh Gupta	2017	IBM
68.	Manisha Singhal	2017	IBM
69.	Nilesh Kumar	2017	IBM
70.	Rashmi Parashar	2017	IBM
71.	Rohit Sharma	2017	IBM
72.	Harshita Jain M.Tech CSE	2017	IBM
73.	Abhirup Debnath	2017	Wipro
74.	Aditya Pandit	2017	Wipro

75.	Akanksha Shrivastava	2017	Wipro
76.	Akanksha Tripathi	2017	Wipro
77.	Alakshendra Singh Yadav	2017	Wipro
78.	Anshul Sheoliha	2017	Wipro
79.	Arjun Singh Gurjar	2017	Wipro
80.	Deepak Singh Baghel	2017	Wipro
81.	Devesh Ojha	2017	Wipro
82.	Diksha Dhanwani	2017	Wipro
83.	Gaurav Shukla	2017	Wipro
84.	Harsh Bhatia	2017	Wipro
85.	Lovesh Gupta	2017	Wipro
86.	Mansi Saxena	2017	Wipro
87.	Megha Sodani	2017	Wipro
88.	Nilesh Kumar	2017	Wipro
89.	Pragam Manoj Gandhi	2017	Wipro
90.	Pranjal Shrivastava	2017	Wipro
91.	Pratap Gangwani	2017	Wipro
92.	Prerna Agrawal	2017	Wipro
93.	Rajat Agrawal	2017	Wipro
94.	Rashmi Parashar	2017	Wipro
95.	Ritu Patel	2017	Wipro
96.	Rohit Sharma	2017	Wipro
97.	Sakshi Kushwah	2017	Wipro
98.	Sakshi Sanghi	2017	Wipro
99.	Mansi Saxena	2017	Amdocs
100.	Pratap Gangwani	2017	Amdocs

101.	Akansh Verma	2017	e-Biz Technocrats
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**Placement B.E. I.T / M.Tech IT**

Sl. No.	Name of Student	Year of Passing	Company Name
1.	Divya Chandron	2017	Infosys
2.	Kanchan Sharma	2017	Infosys
3.	Kavisha Gangwani	2017	Infosys
4.	Priyesh Bhardwaj	2017	Infosys
5.	Rohan Ahuja	2017	Infosys
6.	Shubham Nafade	2017	Infosys
7.	Shubhi Chowksey	2017	Infosys
8.	Vikalp Agrawal	2017	Infosys
9.	Apoorva Singh	2017	Accenture
10.	Avanish Singh Dhakad	2017	Accenture
11.	Deepmala Bhadouria	2017	Accenture
12.	Divya Chandron	2017	Accenture
13.	Girraj Rathore	2017	Accenture
14.	Kartik Gupta	2017	Accenture
15.	Kavisha Gangwani	2017	Accenture
16.	Kavita Saraiya	2017	Accenture
17.	Mayank Agrawal	2017	Accenture
18.	Mayuri Garg	2017	Accenture
19.	Nikita Agrawal	2017	Accenture
20.	Priyesh Bhardwaj	2017	Accenture
21.	Rohan Ahuja	2017	Accenture
22.	Satyam Purwar	2017	Accenture



23.	Shikha Patel		2017	Accenture
24.	Shubham Nafade		2017	Accenture
25.	Shubhi Chowksey		2017	Accenture
26.	Shweta Dwivedi		2017	Accenture
27.	Somya Jain		2017	Accenture
28.	Vikalp Agrawal		2017	Accenture
29.	Yash Jain		2017	Accenture
30.	Divya Chandron		2017	Capgemini
31.	Kavisha Gangwani		2017	Capgemini
32.	Priyanka Tripathi		2017	Capgemini
33.	Shubhi Chowksey		2017	Capgemini
34.	Apoorva Singh		2017	IBM
35.	Kamesh Sobrajani		2017	IBM
36.	Nikita Agrawal		2017	IBM
37.	Shikha Patel		2017	IBM
38.	Shubham Nafade		2017	IBM
39.	Somya Jain		2017	IBM
40.	Yash Jain		2017	IBM
41.	Aditi Jain	M.Tech IT	2017	IBM
42.	Apoorva Singh		2017	Wipro
43.	Divya Chandron		2017	Wipro
44.	Kavisha Gangwani		2017	Wipro
45.	Mayuri Garg		2017	Wipro
46.	Nikita Agrawal		2017	Wipro
47.	Reena Saxena		2017	Wipro

48.	Rohan Ahuja	2017	Wipro	
49.	Shikha Patel	2017	Wipro	
50.	Shubham Nafade	2017	Wipro	
51.	Shubhi Chowksey	2017	Wipro	
52.	Somya Jain	2017	Wipro	
53.	Vikalp Agrawal	2017	Wipro	
54.	Deepak Bamoriya	2017	Amdocs	
55.	Kashish Gahoi	2017	Amdocs	
56.	Mayuri Garg	2017	Amdocs	
57.	Priyesh Bhardwaj	2017	Amdocs	
58.	Pooja Devi	M.Tech IT	2017	Amdocs
59.	Prerna Sharma	2017	E-Biz Technocrats	
60.	Kashish Gahoi	2017	E-Biz Technocrats	
61.	Deepak Bamoriya	2017	E-Biz Technocrats	

ARCH-

Student progression	Against % enrolled
UG to PG	
PG to M.Phil.	
PG to Ph.D.	
Ph.D. to Post-Doctoral	
<b>Employed</b> <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	
Entrepreneurship/Self-employment	

HUMANITES

Student progression	Against % enrolled
UG to PG	NA

PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
<b>Employed</b> - Campus selection - Other than campus recruitment	NA
Entrepreneurship	NA

APPLIED

NA

ELECTRICAL

Student Progression	Percentage against Enroll
UG to PG	25%
PG to Ph.D	10%
Ph.D. to Post Doctoral	Nil
Employed <ul style="list-style-type: none"> <li>• Campus Selection</li> <li>• Other Than campus recruitment</li> </ul>	<ul style="list-style-type: none"> <li>• 72%</li> <li>• 15%</li> </ul>
Entrepreneur	5%

## 25. Diversity of staff

Biotech

Percentage of faculty who are graduates	
of the same parent university	80%
from other universities within the state	20%
from other universities from other states	-

MECHANICAL

Percentage of faculty who are graduates	
of the same parent university	42.8 %
From other universities within the state	51.2%
From other universities from other states	00%

Chemical

Student Progression	Against % enrolled
UG to PG	20 %
PG to M. Phil.	NA

PG to Ph. D.	NA	
Ph. D. to Post – Doctoral	NA	
<b>Employed</b>	UG	PG
Campus Selection	63.33 %	9.09 %
Other than campus recruitment	3.33 %	90.91 %
Entrepreneurs	-	-

MCA

Percentage of faculty who are graduates	
Of the same parent university	50
From other universities within the state	50
From other universities from other states	NIL

Elex:

Percentage of faculty who are graduates	
Of the same parent university	36.36 %
From other universities with in the state	54.54 %
From the universities from other states	9.09 %

Civil

Percentage of faculty who are graduates	
of the same patent university	75%
From other universities within the State	15%
From other universities from other State	10%

CSE/IT

Percentage of faculty who are graduates	
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Of the same parent university	71%
From the universities within the state	21%
From other universities from other states	8%

ARCH-  
NIL

HUMANITES

<b>Percentage of Faculty who are Graduates</b>	%
Of same University/ Institute	<b>16</b>
From Other University within the state	<b>68</b>
From university from other state	<b>16</b>

APPLIED SCIENCE

<b>Percentage of Faculty who are Graduates</b>	
Of same University/ Institute	<b>10</b>
From Other University within the state	<b>70</b>
From university from other state	<b>20</b>

ELECTRICAL

<b>Percentage of Faculty who are graduate</b>	
From the parent Institute	57%
From other university with in the state	7%
From the other university from other state	35%

List of Faculties obtained degree from the parent Institute

S.No	Name	Department	Designation	UG	PG	PhD
1	Dr. Manjaree Pandit	Electrical	Professor	-	-	2001
2	Prof. Hari Mohan Dubey	Electrical	Assistant Professor	-	2002	2017 (Submitted)
3	Prof. Rakesh Narvey	Electrical	Assistant	2002	2006	-

			Professor			
4	Prof. Himmat Singh	Electrical	Assistant Professor	-	-	2018 (Pursuing)
5	Dr. Vijay Bhuria	Electrical	Assistant Professor	1999	-	-
6	Prof. Kuldeep Kumar Swarnkar	Electrical	Assistant Professor	-	2008	-
7	Prof. Praveen Bansal	Electrical	Assistant Professor	2009	-	-
8	Prof. Vishal Chaudhary	Electrical	Assistant Professor	-	2013	-

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.**

Biotech -Nil-

Chemical : Nil

MCA : Nil

Elex: Nil

Civil : nil

CSE/IT-NIL

ARCH- NIL

HUMANITIES- NIL

APPLIED-NIL

ELECTRICAL-TWO

MECHANICAL - **03 Ph.D. (Dr. Avadesh K. Sharma, Dr. Jyoti Vimal and Dr. Amit Aherwar)**

**27. Present details about infrastructural facilities**

Biotech

- a) Library
  - Departmental Library with books of B.E. and M.Tech. courses for the students; new books added each year
- b) Internet facilities for staff and students
  - Broadband Powered Computer Laboratory with Microsoft Windows
  - Bioinformatics Softwares; one Linux Machine; Wifi Internet facility

- c) Total number of class rooms
  - Three with total seating of over 60
- d) Class rooms with ICT facility
  - Two classrooms with ICT facility
- e) Students' laboratories
  - i. Biochemistry Laboratory
  - ii. Microbiology Laboratory
  - iii. Molecular biology Laboratory
  - iv. Plant tissue culture Laboratory
  - v. Microscope Laboratory
  - vi. Instrumentation Laboratory
  - vii. Bioinformatics Laboratory
- f) Research laboratories
  - Shared with Student's Laboratories

## MECHANICA

- a. **Library:** The department has about 250 books in a departmental library for faculty and staff.
- b. **Internet facilities for staff and students:** All faculty, staff and students are having Internet facilities.
- c. **Total number of class rooms:** Five
- d. **Class rooms with ICT facility:** All are enabled
- e. **Students' laboratories:** Department has various laboratories for UG and PG students like
  - Basic Mechanical Engineering Lab
  - Kinematics of Machines Lab
  - Dynamics of Machines Lab
  - Fluid Machines Lab
  - Strength of Materials Lab
  - Metrology Lab
  - Advanced Mechanics of Materials Lab
  - IC Engine Lab
  - CAD/CAM Lab
  - Thermodynamics Lab
  - Thermal Engineering Lab
  - RAC Lab
  - Mechanical Workshop
  - SKF Asset and Reliability Centre
- f. **Research laboratories:** SKF, Strength of Material, HMT, IC Engine are research laboratory for M. Tech/Ph.D. students.

## Chemical

- a) **Library:** Not yet
- b) **Internet facilities for Staff & Students:**

- Internet facilities are available for all the faculties and students.
- WiFi enabled campus

c) Total number of class rooms: 03

d) Class rooms with ICT facility

Room Description	Usage	Shared / Exclusive	Facilities
003	UG Class room	Exclusive	Whiteboard
118	UG Class room	Exclusive	Whiteboard
119	UG Class room	Exclusive	Whiteboard

e) Students' Laboratories

SL. No.	Name of the Laboratory	Exclusive / Shared	Batch Size	No. of Experiments	Equipments	Availability of Manuals
1.	Material & Energy Balance / Energy Technology Lab	Exclusive	30	04	1. Muffle Furnance 2. Redwood viscometer 3. Pensky Martin Apparatus	Yes
2.	Organic Process Technology Lab	Exclusive	30	08	1. Redwood Viscometer I 2. Redwood Viscometer II 3. Biological oxygen demand 4. Dissolved	Yes



					oxygen content 5. Emulsion Polymerization	
3.	Fluid Mechanics Lab	Exclusive	30	08	1.Losses in pipe fittings 2.Notches apparatus 3.Venture, orifice and rotameter test rig 4.Pressure drop through packed bed	Yes
4.	Fluid Particle Mechanics Lab	Exclusive	30	07	1. Sieve shaker 2. Hammer mill 3. Ball mill 4.Plate and Frame Filter press 5. Sedimentation studies apparatus 6. Thickener 7. Jaw crusher	Yes
5.	Mass transfer Lab	Exclusive	30	14	1. Air in vapour diffusion apparatus 2. Tray dryer 3. Rotary dryer 4. Simple steam	Yes

					distillation 5. Cooling tower 6. Fluidised bed dryer 7. Batch crystallization apparatus 8. Solid liquid extraction column 9. Liquid-liquid extraction column 10. Bubble cap distillation column 11. Packed bed distillation column 12. Swenson walker crystallizer 13. Reactive distillation column 14. Wetted wall column 15. Extraction column	
6.	Heat transfer Lab	Exclusive	30	05	1. Double pipe heat exchanger 2. Shell and tube heat exchanger 3. Stefan Boltzmann apparatus 4. Thermal conductivity in	Yes

					metal rod 5. Single Effect Evaporator	
7.	Instrumentation and Process Control Lab	Exclusive	30	08	1. Interacting and non-interacting system 2. Characterization of PID controller 3. Level Control Trainer 4. Flow level Trainer 5. Air purge system	Yes
8.	Chemical Reaction Engineering Lab	Exclusive	30	03	1. Isothermal Batch Reactor 2. Plug flow reactor 3. Continuous Stirred Tank Reactor	Yes

**Design / Simulation Software:**

1. Ansys Fluent
2. Matlab

**d) Research Laboratories: Nil**

**MCA :**

- a) Library: Well equipped
- b) Internet facilities for Staff & Students:
- c) Total number of class rooms

Central Library  
Whole campus  
02

- c) Class rooms with ICT Facility 02  
d) Research Laboratories : 01

Elex:

- a) Library –yes
- b) Internet facilities for staff and students -yes
- c) Total number of class rooms - 05
- d) Class rooms with ICT facility -05
- e) Students’ laboratories -06
- f) Research laboratories - Nil

Civil

- a) Library:** PG library is available.
- b) Internet facilities for staff and students:** available
- c) Total number of class rooms :** 04
- c) Class rooms with ICT facility:** available
- d) Students Laboratories:**

S.No.	Name of Laboratory
1.	Concrete Lab
2.	Computer Lab
3.	Geotech Lab
4.	Geology Lab
5.	Highway Lab
6.	SM Lab
7.	Survey Lab
8.	Structure Lab

9.	PHE / Environment Lab
10.	Water & Wastewater Lab

**e) Research Laboratories: Vibration Measurement System**

CSE/IT

- a) Library : No
- b) Internet facilities for staff and students : Yes available in the cabins and labs
- c) Total number of class rooms : 07
- d) Class rooms with ICT facility : 03
- e) Students' laboratories:08
- f) Research laboratories: 08

ARCH-

a) **Library**

Total No. of Books : 2197

**Journals**

National: 06 Nos.

International : 03 Nos.

**e-journals**

ASCE, Delnet, NPTEL

b) Internet facilities for Staff & Students

**24 Hrs x 7 days (100MB Ps Leased line)**

c) Class rooms with ICT facility

d) Laboratories

1. CAAD Lab
2. GIS-GPS Lab
3. Photography Lab
4. Climatology Lab
5. Building Science Lab
6. Audio Visual Lab

HUMANITIES

- |   |   |
|---|---|
| a) Library                                  | NA                                      |
| b) Internet facilities for Staff & Students | <b>Available</b>                        |
| c) Total no of class rooms                  | <b>01 Lab (for First year students)</b> |
| d) Class rooms with ICT facility            | <b>Available</b>                        |
| e) student Laboratories                     | <b>Language Laboratory</b>              |
| f) Research Laboratories                    | <b>NIL</b>                              |

#### APPLIED SCIENCE

- |   |                                     |
|---|-------------------------------------|
| a) Library                                  | NA                                  |
| b) Internet facilities for Staff & Students | <b>Available</b>                    |
| c) Total no of class rooms                  | <b>08 (for First year students)</b> |
| d) Class rooms with ICT facility            | <b>Available</b>                    |
| e) student Laboratories                     | <b>Physics and Chemistry Labs</b>   |
| f) Research Laboratories                    | <b>NIL</b>                          |

#### ELECTRICAL

- a) **Library:** The department has about 200 book titles in the departmental library for faculty and staff.
- b) **Internet facilities for staff and students:** All faculty and staff member are having Internet facilities. Departmental computer centre is well equipped with latest computers and internet connection for students.
- c) **Total number of class rooms :** Five
- d) **Class rooms with ICT facility :** All are enabled
- e) **Students' laboratories :** Department has various laboratories for UG and PG students like
- Basic Electrical Engineering Lab/Electrical Machines Lab
  - Digital Electronic Circuits & Microprocessor Lab /Analog Electronics Lab
  - Network Lab/Measurement and Instrumentation Lab
  - Power System Lab/Switchgear and Protection Lab
  - Bio-Medical Instrumentation Lab

- Computer Lab/ Control System Lab
- Power Electronics Lab/Electrical Drives Lab

**f) Research laboratories :** One research laboratory for Ph.D. students.

**28. Number of students of the department getting financial assistance from College.**

Biotech:

- Scholarship (HTTA) are given to 7 M.Tech. students from TEQIP Fund.
  - Priya Dulani, Ankita Jain, Divya Sharma (2015-2017)
  - Pooja Raj Chansoliya, Tulika Mukherjee, Swati kamal, Priyanka Sahu (2014-2016)
- GATE Scholarship (HTTA) are given to M.Tech. students from AICTE Fund.
  - Bhanu Jaseja, Ambika Sharma (2013-2015)
  - Mayank Agarwal, Sweta Singh (2013-2014 )
  - Ankit Singh, Vyoma Singh, Shilpi Gupta (2012-2013)
- SC/ST scholarship are given to students according to governmental policy

**MECHANICAL**

B.E. (All Branches)

Type of Scholarship	2013-2014	2014-2015	2015-2016	2016-2017
SC No. of Students	348	344	393	444
ST No. of Students	171	156	127	120
OBC No. of Students	400	411	282	542
Male No. of Students	590	692	609	629
Female No. of students	329	219	192	253

M. Tech.(Non-GATE)

Session	Specialisation	
	MMH	MPH
July 2015 to April 2016	3	
July 2015 to April 2016		3

October 2015 to April 2016	3	
October 2015 to April 2016		4

### Chemical

SL. No.	Financial Assistance	No. of Students
1.	Post Metric Scholarship for OBC	28
2.	Post Metric Scholarship for SC	17
3.	Post Metric Scholarship for ST	03
4.	Yogyata Chatravrati	Nil

### MCA

1. SC/ST/OBC as per state govt. norms

Elex:

10

Civil

Students are getting scholarships from SC / ST welfare department of the government of M.P., alumni sponsored scholarship, GATE scholarship & Teaching Assistantship.

### CSE/IT

**NIL**

**ARCH- All the Sc/St students get scholarship from the State Government**

APPLIED – NA  
ELECTRICAL -30%

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

- Biotech: No New Program introduced in last five years  
Chemical : No new program has been developed recently.

MCA : No new programs started

Elex:

If so, give the methodology. – Yes.



Methodology- Proposal for UG Electronics and Telecommunication was sent to AICTE in consultation with all the faculty members .

Civil : no

CSE/IT NIL

ARCH-NIL

HUMANTIES- NIL

APPLIED –NA

ELECTRICAL-

- Yes. The need assessment exercise was undertaken before the development of new program by having several meetings/ discussion within the department, with industry experts and with the higher authority.
- Syllabi from various reputed institutions were collected and analysed. Experts' feedback/ suggestions were taken. Then the relevant and updated syllabus was framed after approval from board of studies and academic council.

#### MECHANICAL

Syllabi from various reputed institutions were analysed and experts feedback suggestions and feedback obtained from industries, then the relevant and updated syllabus was framed after approval from board of studies and academic council

### **30. Does the department obtain feedback from Biotech:**

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

- HOD takes regular feedback from the faculty members about the books, chemicals and other needs and take necessary actions for the same

b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?

- Feedback from students are taken twice an year

Feedback of Dr Sunita Sharma, Assistant Professor

	S 1	S 2	S 3	S 4	S 5	S 6	S 7	Average
course meets my career expectations	1	5	5	4	5	5	5	4.3
Syllabus contents are useful	1	5	4	4	3	3	2	3.1
course well designed and structured	4	5	5	3	4	4	3	4
Has good teaching ability	5	4	5	5	5	5	2	4.4
teaching style interactive/ involving students	4	4	4	4	4	4	1	3.6
Adequate coverage of course content	4	4	4	4	4	4	2	3.7
voice is audible	4	4	5	4	5	5	1	4
Good communication skills	5	5	5	5	4	4	1	4.1
Has ability to control class	5	5	5	5	5	5	2	4.6
Has ability to motivate/create interest in subject	5	5	5	5	4	5	2	4.4
Relates subject with practical examples	5	4	5	4	5	4	3	4.3
Is approachable & helping	5	4	5	4	4	5	2	4.1
Provides study material/notes etc	4	4	4	4	5	5	3	4.1
inspires students for good behavior & ethical conduct	4	4	4	5	3	3	2	3.6
Use of innovative teaching methods	4	4	4	5	4	4	2	3.9
Shows no gender bias	3	1	4	5	5	5	1	3.4
Availability of teacher in the laboratory	4	1	4	3	3	3	2	2.9
Helping the students in conducting experiments	4	1	5	3	3	3	2	3
Total(90)	7	6	8	7	7	7	3	69.
	1	9	2	6	5	6	8	

Feedback of Prof. H.S. Chaudhary, Assistant Professor

	S1	S2	S3	S4	Average
Course meets my career expectations	5	4	4	5	4.5
Syllabus contents are useful	4	4	4	4	4
course well designed and structured	4	4	2	5	3.75
Has good teaching ability	4	5	4	5	4.5
teaching style interactive/ involving students	4	4	3	5	4
Adequate coverage of course content	4	4	4	4	4
voice is audible	5	5	4	5	4.75
Good communication skills	5	5	4	5	4.75
Has ability to control class	5	4	4	5	4.5
Has ability to motivate/create interest in subject	5	5	4	4	4.5
Relates subject with practical examples	5	5	3	5	4.5
Is approachable & helping	4	4	4	4	4
Provides study material/notes etc	4	5	4	5	4.5
inspires students for good behavior & ethical conduct	4	5	3	5	4.25
Use of innovative teaching methods	4	4	2	5	3.75
Shows no gender bias	3	4	4	5	4
Availability of teacher in the laboratory	4	3	2	4	3.25
Helping the students in conducting experiments	4	3	4	5	4

Total(90)	77	77	63	85	75.5
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Feedback of Prof. Vinod Jatav, Assistant Professor

	S1	S2	S3	S4	S5	Average
Course meets my career expectations	4	4	4	4	4	4
Syllabus contents are useful	4	4	5	4	4	4.2
course well designed and structured	4	4	4	4	4	4
Has good teaching ability	4	4	4	3	4	3.8
teaching style interactive/ involving students	3	4	4	4	4	3.8
Adequate coverage of course content	4	4	4	4	4	4
voice is audible	5	4	5	3	3	4
Good communication skills	4	5	4	3	3	3.8
Has ability to control class	5	4	3	4	3	3.8
Has ability to motivate/create interest in subject	3	4	4	4	3	3.6
Relates subject with practical examples	4	5	4	4	4	4.2
Is approachable & helping	5	5	4	4	4	4.4
Provides study material/notes etc	5	4	5	4	4	4.4
inspires students for good behavior & ethical conduct	5	5	4	4	4	4.4
Use of innovative teaching methods	3	4	2	4	4	3.4
Shows no gender bias	4	5	4	4	4	4.2
Availability of teacher in the laboratory	5	5	5	3	4	4.4
Helping the students in conducting experiments	5	5	5	3	3	4.2
Total(90)	76	79	74	67	67	72.6

Feedback of Dr Shweta Sharma, Assistant Professor

	S1	S2	S3	S4	Average
Course meets my career expectations	5	2	4	3	3.5
Syllabus contents are useful	5	4	4	4	4.25
course well designed and structured	4	4	4	4	4
Has good teaching ability	4	4	4	4	4
teaching style interactive/ involving students	5	4	4	4	4.25
Adequate coverage of course content	4	4	4	4	4
voice is audible	4	4	4	4	4
Good communication skills	5	3	4	4	4
Has ability to control class	5	2	4	3	3.5
Has ability to motivate/create interest in subject	4	2	4	5	3.75
Relates subject with practical examples	3	4	4	4	3.75
Is approachable & helping	4	4	4	4	4
Provides study material/notes etc	5	4	4	5	4.5
inspires students for good behavior & ethical conduct	4	4	4	5	4.25
Use of innovative teaching methods	4	2	4	5	3.75
Shows no gender bias	4	4	4	5	4.25
Availability of teacher in the laboratory	4	4	4	5	4.25
Helping the students in conducting experiments	4	4	4	5	4.25

Total(90)	77	63	72	77	72.25
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Feedback of Dr Indu Yadav, Assistant Professor

	S1	S2	S3	S4	Average
Course meets my career expectations	4	4	4	4	4
Syllabus contents are useful	4	2	4	4	3.5
course well designed and structured	4	2	4	4	3.5
Has good teaching ability	3	2	4	4	3.25
teaching style interactive/ involving students	3	2	3	5	3.25
Adequate coverage of course content	4	4	4	5	4.25
voice is audible	5	2	5	5	4.25
Good communication skills	4	4	4	5	4.25
Has ability to control class	4	4	5	5	4.5
Has ability to motivate/create interest in subject	4	4	4	5	4.25
Relates subject with practical examples	3	2	4	5	3.5
Is approachable & helping	4	2	5	4	3.75
Provides study material/notes etc	3	4	4	5	4
inspires students for good behavior & ethical conduct	4	4	3	4	3.75
Use of innovative teaching methods	4	4	3	5	4
Shows no gender bias	5	2	4	4	3.75
Availability of teacher in the laboratory	4	4	3	5	4
Helping the students in conducting experiments	4	4	3	5	4
Total(90)	70	56	70	83	69.75

Feedback of Dr Rahul Anand, Assistant Professor

	S1	S2	S3	S4	S5	Average
Course meets my career expectations	4	4	4	4	3	3.8
Syllabus contents are useful	4	4	4	4	4	4
course well designed and structured	4	4	4	4	3	3.8
Has good teaching ability	4	4	5	3	4	4
teaching style interactive/ involving students	4	4	5	3	5	4.2
Adequate coverage of course content	4	4	4	3	4	3.8
voice is audible	3	5	5	3	4	4
Good communication skills	3	5	5	4	5	4.4
Has ability to control class	5	5	5	4	3	4.4
Has ability to motivate/create interest in subject	4	5	5	4	5	4.6
Relates subject with practical examples	4	5	4	4	3	4
Is approachable & helping	5	5	4	3	5	4.4
Provides study material/notes etc	5	4	4	3	3	3.8
inspires students for good behavior & ethical conduct	5	5	5	3	4	4.4
Use of innovative teaching methods	3	4	2	3	5	3.4
Shows no gender bias	4	5	4	4	3	4
Availability of teacher in the laboratory	5	5	5	2	4	4.2
Helping the students in conducting experiments	5	5	4	2	4	4

Total(90)	75	82	78	60	71	73.2
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- After receiving the Feedback from the Students, necessary actions are taken in academics schedule, Laboratory or faculty members as per the need
- c. alumni and employers on the Programs and what is the response of the department to the same?
- Feedback from Alumni is taken and necessary actions are made; Alumni also made members of Departmental BOS Committee and suggest needful changes in course curriculum

## MECHANICAL

- a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?:Yes

The department conducts regular academic assessment in BOS meeting. The comment and suggestion form external expert are communicated to the faculty members. Feedback/recommendations are utilized to improve teaching and learning process.

- b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same? Yes

The department conducts regular meeting as well as class coordinator meeting with all students. After the meeting, the department committee evaluates the feedback forms from the students and based on the evolution report, the concerned faculty are advised to improve upon the areas of improvement and upgrade the teaching learning evaluation process.

- c. Alumni and employers on the programmes and what is the response of the department to the same? Yes

Regular alumni meetings were organised in the institute. Department takes suggestions from the alumni. In addition, we also invite experts/employers form industries to be part of BOS. The continuous curriculum assessment and improvement regularly carried out in the department.

## Chemical

- a. faculty on curriculum as well as teaching – learning – evaluation? If yes,

**how does the department utilize it?**

Yes. The HOD conducts regular departmental meetings to review the progress of the students in the class and takes feedback from the faculty. The feedback is

personally looked after by the HOD & necessary remedial actions are taken.

**b. students on staff, curriculum as well as teaching – learning – evaluation and**

**what is the response of the department to the same?**

Yes. The students give feedback twice every semester. The feedbacks are carefully studied at the departmental level and improvements are incorporated.

**c. alumni and employers on the programmes and what is the response of the**

**department to the same?**

Yes. There is equal participation of alumni and industry experts in the Board of Study for framing the syllabus & curriculum.

## MCA

- Faculty on curriculum as well as teaching-learning evaluation? If yes how does the department utilize it?  
The department regularly conducts departmental meetings with the faculty to discuss matters related to curriculum and difficulty if any they are facing in teaching learning process. This helps the department to take quick decisions wherever required to keep teaching learning process intact. There are also discussions regarding the status of course and its effectiveness. New suggestions are always welcomed.
- Students on staff, curriculum as well as teaching-learning evaluation and what is the response of the department to the same?  
The system of feedback forms being filled by students twice after each mid-semester is implemented to get the feedback from students. The design of these forms is such that it helps evaluate the course content, teaching ability, and practical utility of each course. These feedbacks are evaluated in the departmental meetings and remedial actions are taken thereof.
- Alumni and employers on the programmes and what is the response of the department to the same?  
The Alumni are an integral part of the programme. Therefore, the board of studies of the programme intrinsically comprises of the alumni, the industry person, and the faculty (internal and external experts) mainly. This blend of

expertise helps the department to inculcate the curriculum which meets the demands of the industry as well as the professional requirement of the society.

## Elex:

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it? - **Yes, Regular BOS meeting twice in a year to update syllabi & remove obsolescence.**

b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same? –Yes at the end of every semester. and feedback is communicated to teachers for improvement.

	Dr. S. S Bhadauria	Dr. P. K. Singhal	Dr. Rekha Gupta	Dr. Bimal Garg	Dr. Vandana Thakre	Dr. Laxmi Shrivastava	Dr. R. P. Narwaria	Dr. Karun Mark
Has good teaching ability	71.3 %	61.9 %	76.8%	84%	84%	80%	87.3%	69.6%
Teaching style interactive	70.2 %	63.5 %	72.5 %	85.2%	82%	76.4%	88.5%	74%
Adequate Coverage of course content	69.1 %	63.9 %	75.5 %	81.2%	80%	80%	86.4%	76%
Voice is audible	71.8 %	67.8 %	80.4 %	88%	88%	84%	83 %	75.6%
Good communication skill	73.5 %	64.9 %	81.7 %	76.8%	82%	76%	85.4%	68.8%
Has ability to control class	67.5 %	62.3 %	79.6 %	75.1%	68%	90%	76.6%	72.4%
Has ability to motivate/ create interest in subject	71.3 %	59.2 %	72.5 %	83.6%	76%	60%	76.4%	74.4%
Relates subject with	62.1 %	57.8 %	78.4 %	85.6%	70%	60%	87.6%	76.8%

<b>practical examples</b>								
<b>Is approachable &amp; helping</b>	64.8 %	61.1 %	73.4 %	78%	68%	64%	77.3%	78%
<b>Provide study material</b>	68.1 %	65 %	82.8 %	80.8%	80%	76%	83.5%	74.8%

	<b>Prof. Madhav Singh</b>	<b>Prof. Pooja Sahoo</b>	<b>Prof. D. K. Parsedia</b>	<b>Prof. Abhilasha Sharma</b>	<b>Prof. Deepa Sharma</b>
Has good teaching ability	84%	86%	74%	76.3%	77%
Teaching style interactive	86.4%	76%	73%	73.6%	74%
Adequate Coverage of course content	82.4%	80%	66%	70%	75%
Voice is audible	92%	78%	76%	74%	70%
Good communication skill	84.8%	76%	78%	76.8%	76.5%
Has ability to control class	82.4%	72%	64%	70.4%	72%
Has ability to motivate/ create interest in subject	86.4%	80%	70%	71.3%	71%
Relates subject with practical examples	91.2%	76%	76.4%	72.7%	69%
Is approachable & helping	94.4%	88%	69%	78%	80%
Provide study material	83.2%	84%	78%	74.5%	68%



c. alumni and employers on the programmes and what is the response of the department to the same? – **Yes Alumni feedback is used for self assessment for faculty to improve upon.**

## **Civil**

**a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

**b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

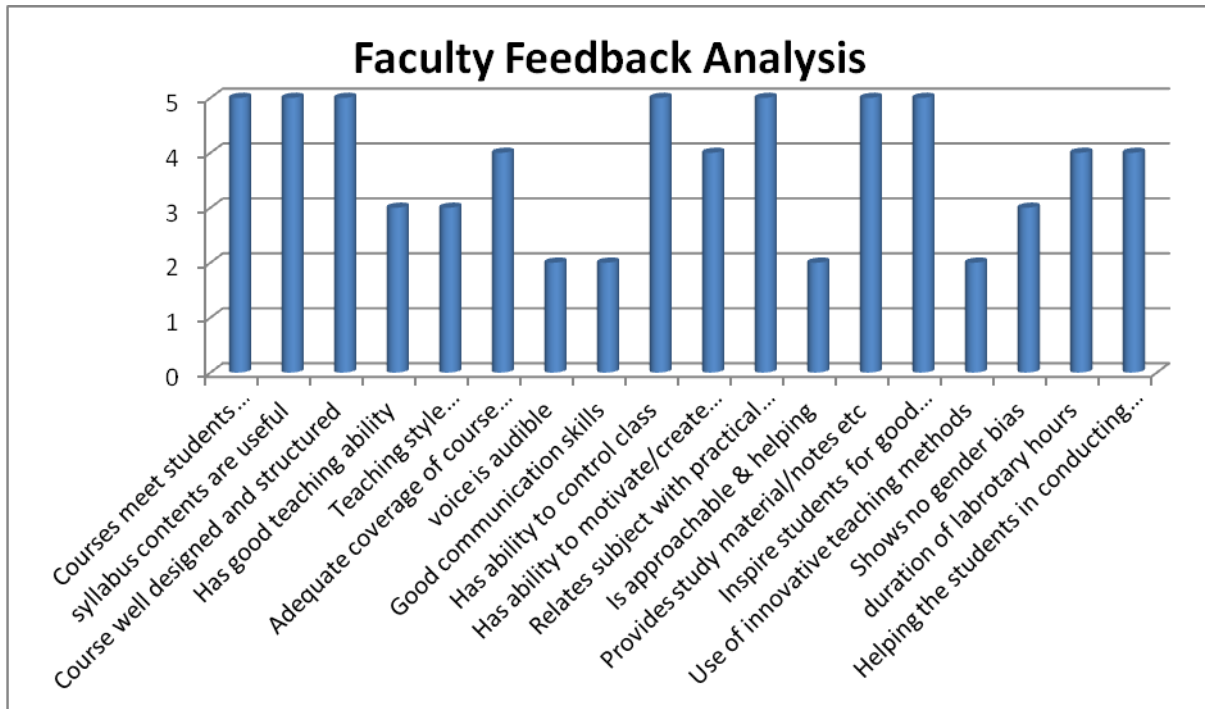
**c. alumni and employers on the programmes and what is the response of the department to the same?**

## **CSE/IT**

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?

- The feedback analysis is done manually
- All the parameters mentioned in the feedback form will be analyzed in two levels
  - 1st level: Average of one parameter with respect to teachers is calculated.
  - 2nd level: Average of averages of the parameters is calculated.
- Ability of teaching with respect to each item and comprehensive ability of the teachers will be analyzed
- All the comments written by the students in the feedback forms will be communicated to the respective faculty members along with their feedback levels to know their strengths and weaknesses and to enhance their teaching skills.

## **ARCH**



## HUMANTIES

- Feed back is collected by core department coordinators and send to higher authorities.

## APPLIED

- a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?
  - b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?
  - c. alumni and employers on the programmes and what is the response of the department to the same?
- There are in all 13 faculties in the department as under. All the above faculties in the department have a sound technical knowledge are engaged at teaching various levels of Engineering (UG level) and PG level (Mathematics papers). As per the feedback report compiled during the academic session 2016-17, all the faculties are found to impart sound subjective knowledge to the students in the institute through dedicated and sincere teaching.

## ELECTRICAL

- a. **Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

The department conducts regular academic assessment by BOS member in BOS meeting. The comment and suggestion from external expert are

communicated to the faculty members. Feedback /recommendations from the students utilized to improve teaching and learning process.

**b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

The department conducts regular meeting as well as class coordinator meeting with all students. After the meeting the department committee evaluates the feedback forms from the students and based on the evolution report, the concerned faculty are advised to improve upon the areas of improvement and upgrade the teaching learning evaluation process.

**c. Alumni and employers on the programmes and what is the response of the department to the same?**

Regular alumni meetings are done in the institute. Department takes suggestion from the alumni. In addition, we also invite Experts/Employers from industries to be part of BOS. The continuous curriculum assessment and improvement regularly is carried out in the department.

**31. List the distinguished alumni of the department (maximum 10)**

Biotech:

S.No.	Name	Designation
1	Abhishek Upadhyay	Humboldt University, Berlin, Germany
2	Mohit Kumar Swanker	Technical Officer, CSIR Institute of Himalayan Bio resources technology, Palampur
3	Avanish Kumar Singh	Zydouscadila Ahmadabad
4	Nikhil Gupta	Leupin, Pune
5	Preeti Nikhara	Biocon, Bangalore
6	Anish Ahmad Siddique	Wockhardt Ltd (R&D)
7	Sourabh Kanungo	Sr. Officer at Fresenius Kabi Oncology Ltd
8	Sweta Singh	DRDE, Haldwani
9	Anuj Jain	Assistant professor at Allen career institute, Jaipur
10	Dhruv Gupta	Cipla Limited

**MECHANICAL**

S.No.	Name of Alumni	Designation	Department
1.	Shri V. K. Saraswat	Member, NITI Aayog	NITI Aayog (GoI)
2.	Lokesh Saxena	Managing Director	DISA India Ltd.
3.	Dr. Susheel	Professor	IIT-Delhi
4.	Dr. Suresh Khator	Professor	Houston University

5.	Shreyash Jain	Scientist	B.A.R.C.
6.	Jasved Kohli	IES Officer	Indian Railway (GoI)
7.	Shripad Baokar	Sr. Manager	ONGC
8.	Dr. Anand Pare	Associate Professor	IIT-Indore
9.	Dr. Harsh Vardhan Samalia	Assistant Professor	IIM-Shilong
10.	Pankaj Gupta	Sr. Manager	Maruti Suzuki (India)

### Chemical

Dr. Pankaj Tiwari – IIT Guwahati

2. Mr. Krishan Kumar Pathak – Faculty, MITS
3. Dr. Patidar – IIT Bombay
4. Dr. A. Thakre – SHELL, Netherland
5. Mr. Satyadeep Sharma – Chemical Metallurgical Assistant, Railway
6. Mr. Pramod Kumar Singh – SAIL
7. Mr. Pradeep Kumar – RIL, Jamnagar
8. Mr. Dinesh Patel – RIL Mumbai
9. Ms. Priyanka Jain – IOCL, Mathura
10. Mr. Rohit Kakkar – ONGC

MCA : nothing mentioned

Elex:

S.No.	Name of Alumni	Designation	Department
1.	Prof R. K. Shevgaonkar	Former Director	IIT Delhi
2.	Prof. Abhay karandikar	Professor	IIT Mumbai
3.	Mr. Jitendra Singh Kushwah	IPS	DIG, PHQ Indore
4.	Mr. Prashant Trivedi	GM BSNL	BSNL , Raipur
5.	Mr. Madhu Shandilya	Professor	MANIT Bhopal

6.	Mr. Deepa Chalisgaonkar	Scientist	NIH, Roorkee
7.	Mr. Praveen Saxena	Senior consultant	Cognizant technology, Bangalore
8.	Mr. Rahul Choudhary	Senior consultant	TCS, New Delhi
9.	Mr. Rajesh Gupta	General Manager	Bharati Airtel Gurgaon
10.	Mr. Sourabh Chowdhary	Successful Entrepreneur	OIST Delhi.

### Civil

S. No.	Name of Alumni	Employed
1	K. K. Sood	Canada (Consultant)
2	L. N. Bansal	USA (Consultant)
3	A. R. Yadav	Australia (Consultant)
4	Vishram Sagar Sharma	Indian Forest Services
5	Sudhir Saxena	IPS
6	Sandeep Saxena	IAS
7	G R Baderia	IAS
8	Sanjeev Sharma	IRS
9	Padamshree Maj. Gen. S. S. Sharma	Indian Army
10	Brig. G. S. Banarjee	Indian Army

### CSE/IT

S.No	Name of Alumni	Branch	Passing out year	Designation	Organization	Country
1	Sunil Kumar	91	CS	Director Cloud Platform Support & IT	Quotient Technology (Formerly Coupons.com)	San Francisco Bay Area, USA

2	Jitendra Raghuwanshi	95	CS	Managing Consultant	IBM	Greater Atlanta Area, USA
3	Narendra Soni	1994	M.Tech (CSE)	Sr. Manager	AT & T	Greater San Diego Area, USA
4	Alok Gupta	2000	computer science	Manager	Cognizant Technology Solutions	Amsterdam Area, Netherlands
5	Shilpa Sambhar	2000	cse	<u>Head - Financial Services ADM</u>	Tieto	Pune, India
6	Prabir De	2001	CSE	Product Marketing Specialist	Qatar Telecom	Doha, Qatar
7	Yogesh Agrawal	2001	cse	Director of Engineering	TeleNav	San Francisco Bay Area, USA
8	Parag Mutatkar	2001	CSE	Sr. Manager	<a href="#">Tata Communications</a>	Mumbai, India
9	Abhishek Buchvani	2006	CS	Head, Producer, Designer	Miniclip Games	<a href="#">Lisbon Area, Portugal</a>
10	Vimal Bakshi	2012	Computer science	Deputy Manager HR	Whirlpool	Pune, India

## ARCH

Dr. R. K. Pandit, Director , MITS, Gwalior

2. Dr. Alok Sharma, MITS, Gwalior

3. Dr. Anjali S. Patil, MITS, Gwalior

4. Prof. Sandeep Sankat, SPA, Bhopal

5. Prof. Ajay Vinodia, SPA, Bhopal

6. Ar. Soma A. Mishra, SDP, Indore

7. Ar. Puneet Panday, Indore

8. Ar. Sanjay Shrivastava,

9. Ar. Manish Miglani

10. Ar. S. Mansvi,

HUMANTIES- NIL

APPLIED SCIENCE

1	Dr. S.K. Verma	Professor	Indira Gandhi Govt Engg. College, Sagar
2	Dr D C Tiwari	Professor (Former Vice chancellor, Jiwaji University, Gwalior )	Jiwaji University, Gwalior
3	Dr Sashi Prabha	Retired Vice chancellor	Jiwaji University, Gwalior
4	Dr (Mrs.)V M Sahai	Retd. Professor	MIT, Gwalior
5	Dr V M Sahai	Retd. Professor	Govt. Science College, Gwalior
6	Dr C P Shinde	Retd. Professor	Jiwaji University, Gwalior

ELECTRICAL

S.No.	Name of Alumni	Designation	Department
1.	Prof.R.K.Shevgaonkar Ex-Director IIT-Delhi	Professor	Indian Institute of Technology Bombay
2.	Dr. R.P. Bhatele	Ex -Executive Director,	MP Electricity Board (MP Power Transmission Company Ltd)
3.	Er. G.K.Pharlia	Retd. Secretary	Ministry of power
4.	Er. R.C. Shrivastava	Ex.Director (Human Resources)	NTPC, New Delhi
5.	Mukesh Bhatia	Senior Manager Materials	Crompton Greaves Limited Distribution Transformers Division
6.	Er.Sandeep Gandhi	Dy. General Manager (QS)	Tata Projects Limited
7.	Er. P.C. Garg	Dy. General Manager	Power Grid Corporation of India Limited
8.	Er. Ramesh Agrawal	Secretary, Ex MLA	Scindia Engineering College Society, Lashkar, Gwalior
9.	Er. Santosh Sharma	Indian railways Topper IES, 2006 batch	Indian railways
10.	Dr. Rakesh Kumar Saxena	Director	SGSITS, Indore

**32. Give details of student enrichment Programs (special lectures / workshops / seminar) with external experts.**

Biotech:

S.No	Name of Expert	Organization	Topic	Date
1	Dr Sanjay Kumar	CSCR, CMC, Vellore	Mesenchymal Stem Cell Based Therapeutic Approach	25/03/2017
2	Dr Kunal Pal	NIT, Rourkela	Biomaterials	25/03/2017
3	Dr Indranil Banerjee	NIT, Rourkela	Tissue Engineering	20/02/2017
4	Dr Ranjit	IIT Kharagpur	Genomics	23/02/2017

	Bahadur			
5	Dr. Anil Haritosh	DTU, New Delhi	Role of Biotechnology in Environment Management	22/10/2016
6	Dr. B.K. Sharangi	NEERI, Nagpur	Plant Biotechnology	22/10/2016
7	Dr. Kishor Shende	Barkatullah Univ, Bhopal	Prediction of RNA Secondary Structure	12/8/2016
8	Dr. Dwijesh C. Mishra	ISARI, New Delhi	Genome Analysis: Gene Prediction	11/8/2016
9	Dr. Manoj Kumar	AIIMS, New Delhi	Protein Structure Prediction using in-silico methods	11/8/2016
10	Dr. RK Dhakad	DRDE, Gwalior	Phylogenetic Analysis	10/8/2016
11	Dr. Punit Kaur	AIIMS, New Delhi	Multiple Sequence Alignment	9/8/2016
12	Dr. Gitanjali Yadav	NIPGR, New Delhi	Pair wise Sequence Alignment	9/8/2016
13	Dr. Chakresh Jain	Jaypee Institute, Noida	Probability and Statistical Analysis of Sequence Alignments	8/8/2016
14	Dr. Ajit Kumar	MDU Rohtak	Bioinformatics Databases	8/8/2016
15	Dr. Pratyosh Shukla	MDU Rohtak	Computational Biology in Convergence to Microbiology	7/4/2015
16	Dr. Arun Kumar Sharma	DU New Delhi	Gene Silencing in Plants	30/01/2015
17	Dr. Rahul Shrivastava	MANIT, Bhopal	Molecular Modelling & Design	30/01/2015
18	Dr. Pradeep Shrivastava	IIT, BHU, Varanasi	Instrumentation controlling in Bioprocess	16/10/2013
19	Dr. Kameshwar Rao	DRDE, Gwalior	Mass- Spectrometry in Proteomics	12/10/2013
20	Dr. Sunil Gupta	CRI, Kasauli	Development of DNA Vaccine	22/10/2013
21	Dr. S.I. Alam	DRDE, Gwalior	Proteomics current updates	20/10/2012

## MECHANICAL

Name of Expert	Expert's Organization	Expert From	City	Country	Topic of Lecture	Date of visit from	Date of visit to
Dr. P.K. Jain	IIITM	Academic	Jabalpur	India	Rapid Prototyping	7/10/2013	2013
Dr. Ghanshyam Singh	Lead Engineer, GE, Bangalore	Industry	Bangalore	India	Simulation based innovation	05/10/2013	2013
Er. A.R. Tupe	Central Railway	Industry	Gwalior	India	Bio-Energy	13/03/2014	2014



Dr Pankaj Agarwal	S.A.T.I.	Teaching	Vidisha	India	Flexible manufacturing system	12/09/2014	2014
Er. C. G. Porwal	Rtd. GM, NTPC	Industry	Delhi	India	Recent trends in Predictive maintenance and its applications in turbine generators	25/03/2017	2017
Dr. Rizwan Uddin	PF Commissioner, Gwalior	Administration	Gwalior	India	Motivation through goal setting	25/03/2017	2017
Dr. S. P. Tiwari	IIT-BHU	Teaching	Varanasi	India	Advance manufacturing system	27/03/2017	2017
Dr. K. B. Mishra	IIT-Roorkee	Teaching	Roorkee	India	Computational fluid dynamics	27/01/2017	2017

### Chemical :

SL. No.	Title of the Special Lecture / Workshop / Seminar organized	Date	Name of the Resource Person	Background (Industry / Academic / R&D)
1.	Special Lecture on "Industrial Prospects and Career options in Industry"	19 <sup>th</sup> Feb 2013	Shri Avinash Mishra	General Manager, Godrej Consumers Pvt. Ltd., Malanpur, Gwalior
2.	Special Lecture on "Career options in LUPIN"	26 <sup>th</sup> Feb 2013	Mr. Sudhanshu Sharma	Engineer, Lupin Chemicals, Bhopal
3.	Invited Talk on "Overview of process design "	2013	Mr. Harsh Sahu	Design Engineer, Honeywell UOP LLC, Gurgaon

4.	Overview of Research Papers	27.02.2016	Dr. K. L. Wasewar	VNIT Nagpur
5.	Nano Technology	27.02.2017	Dr. B. K. Modhera	MANIT Bhopal
6.	Tyre Technology	03.03.2017	Mr. Aslam Sher Khan	J. K. Tyres, Banmore

**MCA :** Department organizes various special lectures for students

**Elex:**

- Dr. Aditya Trivedi on Multipath Fading and Diversity Techniques.
- Dr. B.V. Reddy on Overview of Wireless Communications.
- Mr. Prashant Trivedi, GM BSNL Gwalior, on Fibre Optics and advance Communications.
- Dr. T. S. Rangrajan, Senior Consultant TCS, on RFID
- Mr. Saurabh Chaudhary, from OIST on IT & Infrastructure from New Delhi,
- Dr. Suvijana Awasthi, on Inter Personal Skills, SOS Jiwaji University
- Prof. Mahi R. Singh, Professor Physics and Astronomy University of Western Ontario, London, Canada, on Nano-biophotonic sensors,
- Dr. Deepak Bhatanagar, Chairman IEEE Microwave theory and technique society,.
- Dr. O.S. Lamba, Scientist CEERI Pilani,
- Prof. D.C. Tiwari, former Vice-Chancellor Jiwaji University Gwalior,
- Dr. Deepak Bhatanagar, Chairman IEEE Microwave theory and technique society ,”On Basics of Microwave Antennas and Advances in Microstrip Antennas,”
- Dr. Deepak Bhatanagar, Chairman IEEE Microwave theory and technique society on Advances in Microstrip Antennas,

**Civil**

S. No.	Details of activities	Name of Programme	Dates
1	Expert Lecture by Dr. Prasanna Chandra, Director, Center of Financial Management Bangalore	Issues Related to Project Financing	8 <sup>th</sup> March 2013
2	Expert Lecture by Prof. S.K.Thakkar Former Professor, IIT Roorkee	Earthquake Resistant Design of Structures As Per IS:1893 (Part 1) 2002	15 <sup>th</sup> March 2013
3	Expert Lecture by Dr. A.K. Mullick, Consultant, Cement & Concrete Technology and Former Director	Advances in Concrete Technology	13 <sup>th</sup> April 2013

	General, NCBM		
4	Workshop	Utilization of Waste in Construction & Energy Sectors	24 <sup>th</sup> August 2013
5	Expert Lecture by Er. Giriraj Goyal, Superintendent Engineer (AF) Maharajpura, Gwalior	Pre Engineered Building Structure: An Overview	28 <sup>th</sup> Sept. 2013
6	Workshop	Application of GIS & Remote Sensing in Engineering	25 <sup>th</sup> – 26 <sup>th</sup> Feburary 2014
7	Expert Lecture by Dr. R.K. Shrivastava, Professor, Civil Engg., SGSITS, Indore	National Water Policy	19 <sup>th</sup> August 2014
8	Expert Lecture by Er. U.K. Guru Vittal, Scientist, CRRI, Delhi	Geo Engg. Application in Highway Engg	10 <sup>th</sup> Sept. 2014
9	Workshop	Use of Local Waste material in Rural Road	11 <sup>th</sup> Sept. 2014.
10	National Conference	Alternative and Innovative Construction Materials & Techniques	27 <sup>th</sup> Sept. 2014
11	Workshop	Scheduling of Construction Projects	24 <sup>th</sup> & 25 <sup>th</sup> January 2015
12	National Conference	Green Building For Sustainable Development	19 <sup>th</sup> – 20 <sup>th</sup> March 2015
13	Expert Lecturer	“ Stratagy & status of water management in India ”.	24/02/ 2016
14	Expert Lecturer	Steel fibre reinforced concrete - Its behaviour and applications  An overview of the present scenario	30-08-2016
15	Workshop	“Green Buildings for Sustainable Development	September 23 <sup>rd</sup> , 2016

16	Short Term Course (STC)	Environmental Engineering & Practices	March 08 <sup>th</sup> – 18 <sup>th</sup> , 2016.
17	Expert lecturer by Er. Pradeep Agarwal	Current practices in road construction”	3 March 2017
18	Expert lecturer by Dr. Devesh Tiwari	Current practices in road construction”	3 March 2017
19	Expert lecturer by Dr. Ravindra kumar ,	Current practices in road construction”	3 March 2017
20	Expert lecturer by Dr. C.S. Gokhale	Current Practice in Construction Industry	25March 17
21	Workshop	Current practices in road construction	3 <sup>rd</sup> March 2017

### CSE/IT

<p>Seminars/ Conferences/Workshops/STTP organized</p> <p>Organized a expert lecture (Under TEQIP-II) on “Approximate Reasoning: Fuzzy Set Theory and Applications” delivered by Prof. Tanmoy Som, IIT, BHU, 01 March 2017</p> <p>Organized a expert lecture (Under TEQIP-II) Data Envelopment Analysis: An application to measure the relative performance efficiencies of DMUs delivered by Prof. Shiv Prasad Yadav, IIT, Roorkee, 05 March 2017</p> <p>Organized a expert lecture (Under TEQIP-II) Modeling Neural Networks delivered by Prof. Rama Murthy Garimella, IIIT Hyderabad, 8<sup>th</sup> and 9<sup>th</sup> March 2017</p> <p>One Week FDP on Innovative Trends in Computing Technology &amp; Engineering(Under TEQIP-II) was held from 21st – 25th March, 2017.</p> <p>Organized a One day National Conference on “Cyber Forensics: Tools and Techniques”(Under</p>
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TEQIP-II) held on 18 Feb 2017.
National Conference on Research Methodology (Under TEQIP Phase II) January 29 <sup>th</sup> , 2016
Organized a National Conference on Advances in Information and Communication Technology (under TEQIP-II) during 4-5 Feb., 2016.
Organized a National Workshop titled "Research Methodology" (under TEQIP-II) on 29th January 2016 at MITS Gwalior
Workshop On Cyber World and Its Related Crime(Under TEQIP Phase II) February 25th, 2016
National Conference on advances In Information and Communication Technology (NCAICT-2015) (Under TEQIP Phase II) Feb 23 <sup>rd</sup> – 24 <sup>th</sup> , 2015
Two-week ISTE Workshop on "Cyber Security" conducted by IIT Bombay from 10-20 July 2014 at MITS Gwalior. This workshop was held under the National Mission on Education through ICT (MHRD).
Organized "ISTE Workshop on Computer Networking" under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 30/06/2014 to 05/07/2014.
Organized a three days Workshop on "Cloud Computing" under TEQIP Phase-II during 13th-15th May 2014 at MITS Gwalior.
"ISTE Workshop on Computer Programming" under the National Mission on Education through ICT MHRD, Conducted by IIT Mumbai, 16-21 July 2014.

Two Week NMEICT Workshop on Introduction to Design of algorithm, conducted by IIT Kharagpur  
25-30 may 2015

### ARCH

Date	Name of Speaker	Affiliation	Topic
17.02.2017	Prof. Arpita Dayal and Students of SPA, New Delhi	School of Planning and Architecture, New Delhi	Graphical Thinking of Architecture
14 Feb 2917	By Ar. Tapas Upadhyay,		EARTHQUAKE RESISTANT VILLAGE BUILDINGS
07 Apr 2016	Mr. M.V. Saran ()	CBRI, IIT RORKEE	FOUNDATION AND STRUCTURE
01 Apr 2016	Asst. Prof Sandeep Sankat ,	SPA, Bhopal	UNIVERSAL BARRIER FREE BUILDINGS

**HUMANTIES- NIL**  
**APPLIED SCINECE – NIL**

### ELECTRICAL

S No	Name	Expert's organization	Expert from	Topic of lecture	Date of visit
1	Dr. S.N .Singh	IIT Kanpur	IIT	Future of power system, challenges, Keynote address, National workshop, held at MITS	14.09.2013
2	Dr. Kailash Shrivastava	ABB Corporate Research, Sweden	ABB Corporate Research	Future of power system	14.09.2013
3	Er. Minaxi	(PGCIL)	PGCIL)	Renewable Energy Certificate	14.09.2013

	Garg	PowerGrid Corporation of India Limited		Mechanism'	
4	Er S. K. Pachnanda	MPMKVVCL	MPEB	Technical and Managerial Issues in Restructured Power Market	25.09.2013
5	Mr R K Mahapatra	BHEL	BHEL-Jhansi	Modern transformer manufacturing/maintenance	10.01.2014
6	Er Rameswar Singh	PGCIL Gwalior	PGCIL	Expert lecture on power grid	08.01.2014
7	Er G K Pharlia	NHPC	Ministry of power	Reactive VAR management/control	24.01.2014
8	Dr S C Choubey	UIT RGPV	RGPV Bhopal	Syncrophaser	17.02.2014
9	Mr Gopal Aggarwal	J P Enterprise	J P Enterprise	Smart relay/metering	28.02.2014
10	Er Peejush Gupta	Director CAMTEC (IES)	CAMTEC	Reactive power management	11.03.2014
11	Er Gopal Agarwal	J P Enterprise	J P Enterprise	Energy audit/management	12.08.2014
12	Er G K Pharlia	NHPC	Ministry of power	Smart Grid management/control	01.09.2014
13	Mr Gopal Aggarwal	J P Enterprise	J P Enterprise	On line tuning of PID controller	23.09.2014
14	Dr Pankaj Swrankar	MANIT	MANIT Bhopal	Design of PID controller	24.02.15
15	Er Tarun Sakwar	NHPC	NHPC	Hydro electric power projects(design , commissioning etc)	28.02.15
16	Er Sharath Nair	Crompton Greaves Ltd	Malanpur	Design of drive motors and transformers	04.03.15
17	Er G K Pharlia	NHPC	Ministry of power	Design of energy efficient smart grid	12.03.15
18	Mr Gopal	J P Enterprise	J P Enterprise	PID controlled modern electrical	10.04.2015

	Aggarwal			drives	
19	Er.R K Mahapatra	GM BHEL-jhansi	BHEL-Jhansi	Design of energy efficient power transformers	23.08.2015
20	Er.Satish C Mangal	(Retd) GM NTPC	NTPC-Delhi	Generation of Electricity in modern thermal power plants, working details	16.10.2015
21	D.r Saroj Ragnekar	(retd) HOD & professor	MNIT_BHOPAL	Smart grid	06.09.2016
22	Er. R K Mohapatra	Additional General manager	BHEL-Jhansi	Modern Transformer design/ fault diagnosis	07.09.2016
23	Er D.N. Yadav	Testing engineer, manager	BHEL-Jhansi	Modern Transformer testing	16.09.2016
24	Dr. A K Sharma	HOD Electrical	JEC-Jabalpur	HV generation and testing	19.09.2016
25	Dr. D K Srivastava	Associate professor	BIET-Jhansi	Non conventional energy sources & smart grid	18.10.2016
26	Er Ambreesh Singh	C.E.O.	Govindraj Projects Pvt Ltd,Chamba(HP)	Small /micro hydroelectric power plant	30.01.2017

### 33. List the teaching methods adopted by the faculty for different Programs.

#### Biotech

- Feedback for faculty is collected twice in a semester
- Feedbacks are analyzed by the class coordinator
- Director and HODs initiate remedial measures
- Counselling of staff for better performance
- Course files prepared by faculty
- Analysis of student performance in mid-term and end term examinations
- Quality final year project
- Attendance of Students
- Feedback from the alumni

#### **MECHANICAL**



To improve the students learning institution have provided smart E Board/ Projector classes. The faculty adopted methods to improve the learning of students as following way:

**Learning with Multi-media:**

- Digital library facility
- Language lab facility
- Availability of video lectures through NPTEL
- Video lectures through MOOC
- LCD projectors for presentation

**Classroom Presentations:**

- Allowing students to prepare and present topics from curriculum
- Presentation on advanced mechanical engineering topic which are beyond the syllabus.

**Technical Symposiums:**

Motivating students to participate national/ international conferences, recently undergraduate students also publish paper in various journal and some of them looking for patent.

**Chemical**

- Interactive lectures using various aid such as Black / white board, computer presentations, etc.
- Small group tutorials and assignments.
- Laboratories
- Project based learning by assigning experimental projects to students enabling them to think out of the box.
- Industrial internship.
- Use of online educational supplements such as NPTEL.
- Report writing and Seminars.
- Faculty development training.
- Conduct workshops, conferences and seminars.
- Guest lectures.
- Industrial visits.

**MCA**

- Faculty Self-Disclosures in the College Classroom

- A Tree Falling in the Forest: Helping Students ‘Hear’ and Use Your Comments
- Case Method. Providing an opportunity for students to apply what they learn in the classroom to real-life experiences has proven to be an effective way of both disseminating and integrating knowledge. The case method is an instructional strategy that engages students in active discussion about issues and problems inherent in practical application. It can highlight fundamental dilemmas or critical issues and provide a format for role playing ambiguous or controversial scenarios.
- Cooperative Learning. Cooperative Learning is a systematic pedagogical strategy that encourages small groups of students to work together for the achievement of a common goal. The term 'Collaborative Learning' is often used as a synonym for cooperative learning when, in fact, it is a separate strategy that encompasses a broader range of group interactions such as developing learning communities, stimulating student/faculty discussions, and encouraging electronic exchanges.
- Integrating Technology. Today, educators realize that computer literacy is an important part of a student's education. Integrating technology into a course curriculum when appropriate is proving to be valuable for enhancing and extending the learning experience for faculty and students. Many faculties have found electronic mail to be a useful way to promote student/student or faculty/student communication between class meetings. Others use list serves or on-line notes to extend topic discussions and explore critical issues with students and colleagues, or discipline- specific software to increase student understanding of difficult concepts.
- Distance Learning. Distance learning is not a new concept. We have all experienced learning outside of a structured classroom setting through television, correspondence courses, etc. Distance learning or distance education as a teaching pedagogy, however, is an important topic of discussion on college campuses today. Distance learning is defined as 'any form of teaching and learning in which the teacher and learner are not in the same place at the same time.

Elex:

**PPT, On line lectures , NPTEL, Marker and white board.**

Civil

All the faculty uses conventional method of teaching that involves class room Black board / White board teaching. With the advent of new technology, some of the faculty have now started to use the techniques involving the use of projector based smart class rooms wherein the faculty prepares and delivers his lectures on Microsoft power point

along with the help of online web courses available on NPTEL etc. Apart from these some of the faculty involves the use of following innovative practices to improve the learning of the students.

#### CSE/IT

1. Classroom Teaching
2. Practical Labs
3. Flipped Classroom

#### ARCH- Audio / Visual

#### HUMANTIES-

- **Interactive Learning**
- **Students Demonstration/Teaching**
- **One to one interactions with students**
- **Chalk and talk method**
- **Using projectors and power point presentations**
- **Assignments for home use**

#### APPLIED

- **Interactive Learning**
- **Students Demonstration/Teaching**
- **One on one interactions with students**
- **Chalk and talk**
- **Using projectors and power point presentations**
- **Assignments for home use**

### **ELECTRICAL**

- **White Board and Marker**
- **Power Point Presentation**
- **Audio-Visual aids (films and videos on subject related topics)**
- **Assignment/Quizzes**
- **Group Discussion Method**
- **Remedial classes for slow learners**
- **Out-of-syllabus study**

**34. How does the department ensure that Program objectives are constantly met and learning outcomes monitored?**

Biotech- By analyzing the students getting selected in off and on-campus placements and students clearing GATE or NET.

#### MECHANICAL

In order for the objectives to be met, class-wise course and lecture plan is made by the concerned faculty. If the objectives are not met within the planned duration, extra classes are arranged so that none of the courses will be left undone.

The learning outcomes are monitored by daily assessment of their comprehension through practical viva quizzes, time to time written test quizzes and semester exams.

Chemical : The department conducts three mid semester tests, two quizzes, surprise tests and class tutorials to ensure that the programme objectives are constantly met.

MCA: Every faculty member prepares a teaching plan, showing lecture-wise topics to be taught. These plans incorporate the topic wise distribution of the syllabus prescribed by the college and as per the number of lectures allotted. The topics to be covered, the time required, the content that would be covered over a period of one week, in a month, and in a semester is properly described in the teaching plan. Programme Education Objectives (PEO's) are formed in consultation with stakeholders : faculty members, alumni, parents, employers etc. There are two mid-semester exams for the students and average of these two mid-semester exam helps in evaluation of the programme objectives. The end-semester exams, presentations in seminars, performance in campus helps monitoring the outcome of the programme.

Elex:

**Mid-sem , Quiz , Assignments , Internal viva and End semester exam .**

Civil

1. Semester exam results of the students
2. Placement of the students

**CSE/IT  
NOT MENTIONED**

**HUMANTIES- • Regular class tests and Sessionals**

- Quizzes and interaction with students
- Regular evaluation in laboratory work

APPLIED

- Regular class tests and Sessionals
- Quizzes and interaction with students
- Practicals

## ELECTRICAL

- Alumni and Industry Expert feedback report.
- Continuous Internal Assessment
- Classroom seminar sessions
- Faculty feedback report
- Regular department meetings of faculty to take stock and plan.

### **35. Highlight the participation of students and faculty in extension activities.**

#### Biotech

- Institution promotes institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students by enrolling the students in NCC and NSS (both B.E. Degree mandatory qualifier)
- Through NSS students literate the under privileged children and promote the education among these children
- Institution also involves the students to organize the blood donation camp and to distribute the clothes to the under privileged children; Department of biotechnology encourages students to participate in these activities
- Newly implemented syllabi includes 'Rural Outreach' course in which students visit a rural area, select one prevailing problem and propose the solution

#### MECHANICAL

The institute runs a society for social cause to create awareness about social responsibility among the students. The societies are named as National Social Service (NSS) are running under Dr. Manish Kumar Sagar (Associate Professor, Mechanical Engineering Department) under the guidance of the Director. The students of various department and semester actively participate in such activities. NSS MITS unit has registered more than 1972 students. Besides participation in host institutes, students are encouraged to participate in various technical fests organized by premiere institutes.

#### **NSS Activities:**

#### **NSS Activities 2016-2017**

#### **15. Rally on World Population Day:**

A rally for awareness on "VishvaJansankhya Divas" i.e. **11/07/2016** (Monday) from Phool Bag to GalavSabhagar, Jiwaji University was organized by National Service Scheme, Jiwaji University, Gwalior. Twenty-three students/ volunteers of NSS unit MITS with programme officer were participated in this event.

#### **16. Voter Awareness Programme:**

Mr. R. C. Mishra, Dy. election officer delivered a lecture to the students/ volunteers on **30/07/2016** and aware the students. Afterwards, students/ volunteers aware the public nearby Gola ka Mandir area and add the 145 people by submitted their form-6 (New Voter ID Card/ add their name in voter list) to election office.

#### **17. Literacy cum Awareness Programme:**

The N.S.S. unit is continuously running literacy cum awareness programme for the underprivileged children in the institute premises since year 2011. During the academic year

2016-17, Forty NSS volunteers started to teach the underprivileged children from **01/08/2016** on regular basis (Monday to Friday) at 4:30 P.M. to 6:30 P.M.

#### **18. Seminar on Waste Management:**

A seminar on "Waste Management" was organized at student activity centre on **27/08/2016** at 01:30 P.M. under National Service Scheme Unit. Prof. O. P. Agrawal, Professor, Jiwaji University, delivered a lecture on waste management to the 470 students/ volunteers.

#### **19. Plantation:**

The volunteers of NSS unit, MITS planted the 751 siblings in the institute campus from **04/09/2016 to 15/09/2016**.

#### **20. Workshop on Digital India at Jiwaji university:**

Eleven volunteers of NSS unit MITS were participated in the one-day workshop on "Digital India" organized by National Service Scheme, at Jiwaji University on **20/09/2016**. NSS unit MITS won the first prize in "Strategy Making Completion" in this workshop.

#### **21. Cultural Program on NSS Day:**

A cultural program (Dance and Poetry with social Messages) was organized on NSS day i.e. **24/09/2016**. Forty-Six NSS volunteers and faculty members presented their solo/ group dance and poetry on various social issues. Approximately 400 volunteers were presented there.

#### **22. Blood Donation Camp:**

A blood donation camp was organized on the Punya-Tithi of Late His Highness Shrimant Madhav Rao Scindia (**30/09/2016**) with association of Red Cross Society. 160 units were donated by students, employees and faculties to Red Cross Society.

#### **23. Rally on Swaksh Bharat Abhiyan:**

On occasion of birth anniversary of Mahatma Gandhi, a rally on "Swaksh Bharat Abhiyan" was organized on **02/10/2016** from MITS Main Gate to Gandhi Club near Akashvani via Bus stand & return back via Akashvani, Indramani Nagar to MITS Campus. 500 students were participated in this event.

#### **24. Seminar on Traffic Rules & Regulation:**

Mr. Vikram Singh Kanpuriya (DSP, Traffic Police) and his team delivered a lecture on "Traffic Rules & Regulation" and show various video to students/ volunteers on **16/10/2016**. 395 volunteers were participated in this program.

#### **25. Women Empowerment:**

NSS unit MITS organized a seminar on women empowerment on **21/10/2016**. Mrs. Neelam Dixit, PIA and Prof. Manjhari Pandit share their knowledge with 350 students.

#### **26. One Day Camp:**

NSS unit MITS organized one-day camp at "शासकीयदृष्टि एवं श्रवणबाधितार्थ उच्चतर माध्यमिक विद्यालय, मुरार, ग्वालियर" on **22/10/2016**. Some activities such as Drawing, Singing, Dancing, Games, etc. were organized and distributed notebook, pencil, fruits and snacks to them. 118 volunteers were participated in this event.

#### **27. Medical Camp & Awareness Program at Village:**

NSS unit MITS organized a medical camp at kheria village. Volunteers distribute the free medicine and aware the people for cleaning. 75 students were participated in this event.

#### **28. Oath on Constitution Day:**

NSS unit MITS celebrate the 26 November as a constitution day. Approximately 450 students with employees and faculty member took a oath for their constitutional duties. A quiz is also organized in this day.

#### **29. Seminar and awareness program on Digital Economy:**

NSS unit MITS organized a seminar on digital economy under the MHRD camping of VITIYA SAKSHARTA ABHIYAN on 11/01/2017. Prof. R S Jadon was the resource person and 350 volunteers were participated in this program. Volunteers also visited to gola ka manidr and hazira to aware the shopkeepers and various other peoples from 12/01/2017 to 12/02/2017.

### **30. Seven Days Special Residential Camp (Rural):**

NSS unit MITS organized a seven days special residential camp on “Public Cleanness, Public Health & Public Awareness” from 15/03/2017 to 21/03/2017 at VivekanandNeedam, Mahalgaon, Gwalior. 51 volunteers were participated.

## **NSS Activities during 2015- 2016**

1. Literacy cum Awareness Programme (stared w.e.f. 03/08/2015)
2. Dengue Awareness & Cleaning Programme (Organized on 24/09/2015)
3. Blood Donation Programme (Organized on 31/10/2015)
4. Literacy Awareness Campaign/ Programme (Organized on 01/11/2015)
5. Rally on Awareness on air pollution/ eco Deepawali (Organized on 07/11/2015)
6. Yatayat Sankalp (Organized on 12/01/2016)
7. AIDS/ HIV awareness rally (Organized on 06/01/2016)
8. SwakshataAbhiyaam (Organized on 07/02/2016)
9. AIDS/ HIV literacy program (Organized on 02/03/2016)
10. AIDS/ HIV awareness programme (Organized on 05/03/2016)
11. Blood donation camp (Organized on 10/03/2016)
12. Seven Days Special Residential Camp (Rural) “*Public Cleanness, Public Health & Public Awareness*” from 11<sup>th</sup> - 17<sup>th</sup> March, 2016 at VivekanandNeedam, Mahalgaon, District Gwalior, Madhya Pradesh
13. Oath on swkshtaabhiyaan

## **NSS Activities during 2014- 2015**

1. Literacy cum Awareness Programme (stared w.e.f. 01/07/2014)
2. Seminar on “Tobacco Intoxification” and Oath on fight against the use of tobacco. (Organized on 24/09/2014)
3. Seminar on “Women Empowerment” (Organized 28/09/2014)
4. Blood Donation Programme (Organized on 30/09/2014)
5. Organized the rally on HIV/ AIDS from bada to phoolbagchauraha on 31/01/2015.
6. Organize the seminar on AIDS on 01/02/2015.
7. Literacy Awareness Campaign/ Programme (Organized on 28/02/2015)
8. Seven Days Special Residential Camp (Rural) “*Public Cleanness, Public Health & Women Safety*” from 09<sup>th</sup> - 15<sup>th</sup> March, 2015 at Mohanpur Village, District Gwalior, Madhya Pradesh.
9. Two students participated in State Camp from 12-03-15 to 18-03-2015.

### **Chemical**

Students:

- Participation in inter and intra - college symposiums –Programming contest
- paper presentations, project presentations etc.

- Participation in cultural events and competitions.
- Active participation in department level and University level Students associations.

Faculty:

- Participation in administrative activities.
- Participation in student welfare activities.
- Helping students in association and club activities.

MCA :

Seminar and vocational training are conducted for students.

Teachers are encouraged to attend and participate in various faculty development Programmes, seminars, conferences and workshops in India and abroad to update their knowledge.

Elex:

**Industrial Vists , Workshops, Seminars ,Expert lectures.**

Civil

Three days short terms course on `Life Cycle Assessment` at IIT Kharagpur

Attended by following students:

1. Riya Govil - Environmental Engg.
2. Varun Neekhara - Environmental Engg.
3. Abhishekh Joshi - Environmental Engg.
4. Rishabh Pathak - Structural Engg.
5. Swapnil Verma - Structural Engg.
6. Mansi Jain - Construction Technology & Management
7. Abhimanyu lad - Environmental Engg.

**Faculty :**



**Self-studyReport**  
**Madhav Institute of Technology & Science, Gwalior (M.P.)**

Faculty Name	Faculty Training (attended) For (Seminar / Workshop/ Conference/ Symposium/ Others)	Nature of Training (Exposure/ interaction with industry / Teaching Competence/ Research Competence/ Management Skills )	Title of Training	Broad of Area of Training	Training Provider (Institution/ Organization / industry )	Institution/ Organization	Years (2016-2017)
Prof. A. Tiwari	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017
Prof. A. Tiwari	National Workshop	Exposure		TEQIP-II	IIT, Gandhinagar	Gandhinagar	24/09/2016 to 25/09/2016
Prof. A. Tiwari	National Workshop	Exposure	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Dr. R. Kansal	National Workshop	Exposure	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Prof. D. Rastogi	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017
Prof. D. Rastogi	National Workshop	Exposure	Land Use/ Land Cover Change Modelling and prediction	GIAN	Civil Engg. Deptt. MANIT Jaipur	Malaviya National Institute of Technology Jaipur	July 4 – 8, 2016
Prof. D. Rastogi	National Workshop	Exposure	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Prof. G. Bhadoriya	National Workshop	Teaching Competence	Quality in Technical Education: A Challenge	TEQIP-II	Elect. Engg. Deptt. MITS Gwalior	MITS Gwalior	18-19 <sup>th</sup> Nov. 2016
Prof. G. Bhadoriya	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017
Prof. A. K. Agarwal	National Workshop	Research Competence	Intellectual Property rights & patents	TEQIP-II	MITS Gwalior	MITS Gwalior	04 <sup>th</sup> Feb. 2017

### CSE/IT

<b>Association</b>
Organization/Society
IBM Centre of Excellence
Infosys Campus Connect
IIT-bombayx Mooc
<b>Chapters</b>
ACM Chapter
CSI Student Chapter
IEEE Student Chapter

HUMANITES-

- **All the students and faculty are encouraged to participate in the co-curricular activities**

#### **APPLIED**

- All the students and faculty are encouraged to participate in the extra co-curricular activities

#### **ELECTRICAL**

The Department promotes Institutional Social Responsibility through institution neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students.

The department is committed to social responsibility, by carrying out its mission –

1. The department aims at providing an atmosphere of holistic development of students thereby transforming them into responsible citizens by transferring moral values.
2. It aims at pursuing excellence towards creating students with high degree of intellectual, professional and cultural development to meet the national and global challenges.
3. The department is conscious of its role in campus community connection, well being of its neighbourhood and has initiated a number of community development activities. These activities include:

- Involving in NSS Camps
- Involving students in Blood Donation
- Participation in inter and intra-college symposiums –Programming contest, paper presentations, project presentations etc.
- Participation in student welfare activities etc

### **36. Give details of “beyond syllabus scholarly activities” of the department.**

#### **Biotech**

- Encouraging students for Innovative Idea generation; forwarding best Ideas to Director for fund grant
- Encouragement to students to join BGM (Biotechnology Group of MITS)
- Encouraging students to participate in MOOC and SWAYAM (MHRD) Courses
- Utilization of Virtual Laboratory
- Teaching using NPTEL Lectures

#### **MECHANICAL**

- Various Workshops organised by the department.
- Various Expert lectures organised by the department.

#### **Details of industry expert invited**

S.No.	Name of Expert	Name of Organization	Topic of Lecture	Date of Visit From	Date of Visit To	Year 2013 - 2014
01	Shripad Baokar	ONGC	Marine Engine and Equipment's	19/09/2013	19/09/2013	2013
02	Dr. Ghanshyam	Lead Engineer,	Simulation based	5/10/2013	5/10/2013	2013

	Singh	GE,Banglore	innovation			
03	Er. E.R. Tupe	Central Railway	Bio Energy	13/03/2014	13/03/2014	2014
04	Dr. Sainath Pawaskar	Sandhiasthi India Ltd	Mechanical Eng.& cross disciplinary research dawn of a new era	9/07/2014	14/07/2014	2014
05	Mr. Abhash Acharya	SKF india Ltd.	Vibration analysis & bearing technology	10/09/14	10/09/14	2014
06	Er. Arvind Dixit	Advance Tech.	Industry Practice for solution Approach	29/09/2014	29/09/2014	2014
07	Dr.Vijay Parmar	University of Leeds, U.K.	Financial Engineering & Mathematical Modeling	31/01/2015	31/01/2015	2015
08	MR. Satish Chandra Mangal	NTPC Ltd & Technology	Net metering the solar power generation, innovation methodology	15/09/2015	15/09/2015	2015
09	Er. C. G. Porwal	Rtd. GM, NTPC 25/03/2017	Recent trends in Predictive maintenance and its applications in turbine generators	25/03/2017	25/03/2017	2017
10	Dr. Rizwan Uddin	PF Commissioner, Gwalior	Motivation through goal setting	25/03/2017	25/03/2017	2017
11	Dr. S. P. Tiwari	Advance manufacturing system	IIT, BHU	27/03/2017	27/03/2017	2017

**Details of Workshop/STTP/conference organised**

S.No.	Title	Workshop/STTP/conference	Year
1	Engineering Thermodynamics (Dec. 11, 2012 – Dec. 21, 2012)	Workshop	2012
2	Research Methodology	STTP	2013
3	Engineering Mechanics	Workshop	2013
4	Basic Bearing Technology	STTP	2014
5	Advanced Bearing Technology	STTP	2014
6	MATLAB Software	STTP	2014
7	Lab-View Software	STTP	2014
8	Pedagogical Training	STTP	2014
9	Hybrid Solar PVT Technologies	workshop	2014
10	Training for CATIA V6	STTP	2014
11	Fluid Mechanics (May 20 – 30, 2014)	Workshop	2014
12	Innovations in Energy	workshop	2015
13	Quality in Technical Education: A challenge	workshop	2016
14	Manufacturing Systems	workshop	2016
15	Finite Element method for Engineers	Workshop	2016
16	Vehicle Dynamics	Workshop	2016
17	Manufacturing Systems	Workshop	2016
18	Manufacturing Systems	Workshop	2016
19	Vehicle Dynamics	Workshop	2016
20	Finite Element Method for Engineers	Workshop	2016
21	Air conditioning: Sizing and calculations	Workshop	2017
22	Advances in Manufacturing Systems	Workshop	2017

**Chemical**

The various activities carried out based on the NSS activities are listed below:

- Overall development in children

- \* Regular evening classes are being organized for children of under privileged class in which they are provided with the basic education of maths, science and English.
- \* Conduction of sports and cultural activities.
- \* Activities involving healthy habits, good touch – bad touch etc., from day to day life.
- Charity Events
  - \* “Udaan” – Stationary is being distributed every year to students.
  - \* Chocolates and sweets are distributed before Diwali.
  - \* “Blood Donation Camp” organized under Red Cross Society.
- General Awareness
  - \* Seminars are conducted on
    - ❖ Women Empowerment
    - ❖ Road Safety
    - ❖ Anti Tobacco
- 7 days camps are organized every year on
  - \* Public Health
  - \* Cleanliness
  - \* Safety of women
  - \* Literacy

Apart from these, students participate in Idea Generation, NCC and other sports activities also.

#### MCA

- Students are encouraged to participate in various extra activities which include sports, cultural activities
- Students participate in various activities through NSS/NCC which helps them develop social and ethical values.
- Every year the students in the department organize Teachers’ Day.

Elex:

**Paper Presentation , Poster Presentation, Photography, Quiz competition by students under IETE ,IET, ISTE.**

Civil

S.	Details of activities	Name of Programme	Dates
----	-----------------------	-------------------	-------

No.			
1	STTP	Utilization of Waste in Construction & Energy Sectors	21 <sup>st</sup> - 25 <sup>th</sup> October, 2013
2	Workshop	Application of GIS & Remote Sensing in Engineering	25 <sup>th</sup> – 26 <sup>th</sup> February, 2014
3	STC	Earthquake resistant design of structures	19 <sup>th</sup> – 29 <sup>th</sup> March, 2014
4	Workshop	Use of Local Waste material in Rural Road	11 <sup>th</sup> September, 2014.
5	National Conference	Alternative and Innovative Construction Materials & Techniques	27 <sup>th</sup> September, 2014
6	Workshop	Scheduling of Construction Projects	24 <sup>th</sup> & 25 <sup>th</sup> January, 2015
7	National Conference	Green Building For Sustainable Development	19 <sup>th</sup> – 20 <sup>th</sup> March, 2015
8	Workshop	“Green Buildings for Sustainable Development	September 23 <sup>rd</sup> , 2016
9	Short Term Course (STC)	Environmental Engineering & Practices	March 08 <sup>th</sup> – 18 <sup>th</sup> , 2016.
10	Workshop	Current practices in road construction	3 <sup>rd</sup> March 2017

**CSE IT ; NOT MENTIONED**

**HUMANTIIES- • The Department conducts BOS Workshops**

**APPLIED -• The Department conducts BOS Workshops**

### **ELECTRICAL**

- Organizing National Level Inter-collegiate Competition for the college students.
- Participation in various Inter-collegiate competitions by our students.
- “Arduino Workshop” organized by Department of Electrical Engineering, MITS in association with Robodia, Bhopal, held on 24<sup>th</sup> -25<sup>th</sup> September, 2016) at MITS Gwalior.
- “Techno-Hunt” organized by Department of Electrical Engineering, MITS in association with “Data Quest, IIT Bombay” held on 29<sup>th</sup> September, 2016) at MITS Gwalior.
- NSS activities are organised in the college.

**37. State whether the Program/ department is accredited/ graded by other agencies. Give details.**

**Biotech-NIL-**

### **MECHANICAL**

- NBA 2003 – 3 Years (06/02/2003 – 06/02/2006)
- NBA 2013 – 2 Years (18/09/2013 – 18/09/2015)

**Chemical ;** The B.E. in Chemical Engg programme was accredited by NBA in 2003 for a period of 3 years.

MCA : nothing

Elex:

**1. B.E. Electronics**

**Accredited by NBA-AICTE in 2003 for 03 years**

**Re- Accredited by NBA-AICTE in 2013 again for 02 years**

**2. ME Communication Control and Networking**

**Accredited by NBA-AICTE in 2003 for 03years.**

**Civil : NIL**

**CSE IT - CSE Programme was accredited by NBA(National Board of Accreditation) twice in the year 2003 and 2013. IT was accredited in the year of 2013.**

HUMANTIES- NA

APPLIED-NA

### **ELECTRICAL**

<b>S. No.</b>	<b>Year of Start</b>	<b>Name of Program</b>	<b>Accredited</b>
1	1957	B.E. Electrical Engg.	3 years (w.e.f. 11.02.03) F. No. NBA/ACCR-127/2001, dt. 6/2/2003

			5 years (w.e.f. 18.09.13) F. No. 27-65/2010- NBA dt. 04/10/13
2	1995	M.E. Industrial Systems & Drives	3 years** (w.e.f. 12.12.2003) F. No. NBA/ACCR/127/2003 dated 22.12.2003

\*\*Accreditation (Visit due)

### 38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

#### Biotech

##### Strength:

- Dedicated and highly efficient faculty
- No of publications by faculty members in last 4 tear are commendable
- Infrastructure of the department is up to mark
- Departmental library is rich with reference books

##### Weaknesses:

- Socio-economic background of students admitted in the course is responsible for unsatisfactory result in the first two semesters.
- Insufficient funding.

##### Opportunities:

- Level of academic excellence which the college has acquired make it possible for students to get absorbed in the core companies.
- College has to device a mechanism to materialize it.
- New labs like bioprocess engineering lab, tissue culture labs may be established by utilizing the skill of faculty and staff.

##### Challenges:

- The vacant post must be filled and the recruitment of senior faculty should be done ,for this permission from the government is a great challenge.
- Retaining students in the biotech branch is a challenge.

#### Chemical

##### Strengths:

- Qualified and dedicated Faculty.
- Collaborative effort of faculty members and technical staff members.
- Organizing Seminars, Workshops, and Conferences by receiving grants from funding agencies such as TEQIP – II.
- Mentors constantly provide care for students in solving their technical problems.
- All the courses are approved by AICTE.



**Weaknesses:**

- Shortage of faculty & department library.
- Lack of Consultancy work.
- Lack of Inter-disciplinary projects.
- Lack of establishment of alumni association.
- Research and development and extension activities are to be strengthened.

**Opportunities:**

- Provide consultancy services to nearby industries.
- Develop expertise in core/emerging areas.
- Establish collaboration with overseas institutes/agencies as well as with Indian institutions.
- Partnership with premier industries for new product development.
- To apply for more research funds from funding agencies like AICTE, UGC, DST, etc.

**Challenges:**

- Rapidly advancing technology may require more human resources and equipment.
- Quality of intake is coming down as good students are opting for deemed universities within and outside the state.
- Competing with other institutions.
- Achieving high job placement for students.
- Faculty retention.

## MECHANICAL

**Strengths:**

- Seven faculty members are Ph.D from IIT,s NITs and one from UK in various disciplines of Mechanical engineering.
- Faculty Members are actively involved in research activities, two faculty members received M.P. young scientist award for their research.
- Good quality of students at UG and PG level.
- Faculty members are actively involved in guiding student for GATE and other technical competitive examinations.
- Most of the faculties in the department is below 40 years, as the department is having young faculty staff which shows its dynamic ability in interactive teaching.
- All class rooms are equipped with projectors along with audio visual interaction.
- Lab facilities have all instruments in working condition and also have facilities of standard testing.
- Committed & dedicated faculty with good team work spirit.
- University recognized and QIP Research Centre to enrich research activities.

<ul style="list-style-type: none"> <li>• The Department was accredited by NBA-AICTE.</li> </ul>
<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>• More infrastructure development is required in the department</li> <li>• More faculty strength is required in the department</li> <li>• Strong relation between department and industry is required</li> <li>• Exposure to real-time industry based project is required</li> <li>• Some faculty require international exposure of industrial, academic and institutional development.</li> <li>• More effort for skill up gradation of technical supporting staff is needed.</li> <li>• Effort for entrepreneurship is also needed.</li> <li>• More budgets for in-house R &amp; D activities is needed.</li> <li>• Lack of Consultancy and Funded Projects.</li> <li>• Lack of collaborative research with research institutions.</li> <li>• Lack of placement in core companies</li> </ul>
<p><b>Opportunities:</b></p> <ul style="list-style-type: none"> <li>• We also have approachable links with Malanpur Industrial Area to enhance our industrial exposure.</li> <li>• We are also close to CAMTECH, ABV-IIITM and other national institutions like IIT-D, IIT-Indore, MANIT-Bhopal etc. which gave us opportunity to interact with them.</li> <li>• Scope for strengthening the Industry Institute interaction for better placements of students.</li> <li>• Networking with other Institutions for sharing/acquiring knowledge in advanced technologies.</li> <li>• To develop students into successful entrepreneurs for the economic development of the country.</li> <li>• Strong alumni from the department who are entrepreneurs, executives / directors in industries and scientists/academicians in Institutes.</li> <li>• To get funded projects and research innovations from various organizations.</li> <li>• To have consultancy and other industry involvement.</li> </ul>
<p><b>Challenges:</b></p> <ul style="list-style-type: none"> <li>• Creating entrepreneurship awareness and skills to the students.</li> <li>• Encouraging students to do In-house project in a stipulated time period.</li> <li>• Motivating higher education awareness to the students.</li> <li>• Creating awareness to the faculty members to utilize the complete facilities from our department and college.</li> <li>• More number of R&amp;D Projects/Consultancy work to be achieved in the coming years.</li> <li>• To place students in core companies.</li> <li>• Attracting High quality students to post graduate studies / Research.</li> <li>• Achievement of higher success rates of students in competitive examination.</li> <li>• Bridging gap between academic and industrial technologies fast changing.</li> </ul>

## MCA

### ■ STRENGTHS

- Highly Qualified Core faculty
- Latest state-of-the art computing facilities
- Govt. aided status and Recognition
- Oldest MCA Programme in the whole country
- High Speed internet connectivity

- Highly successful alumni
- WEAKNESSES
  - Building space: More space is required for departmental library, seminar hall, faculty rooms and class rooms
  - No. of Faculty required according to AICTE norms
  - Govt. Binding on Fee structure
  - Selection mechanism
  - There are no software units in Gwalior and nearby areas due to which student training activity is affected
- OPPORTUNITIES
  - Connectivity to capital
  - Campus Placement
  - Continuous Demand of IT Manpower
  - Innovative Application Development
  - Support of Engineering Faculty
- CHALLENGES
  - Decline in number of students opting for Science graduation (B.Sc.) which is the potential input for MCA Programme
  - Rare availability of good faculty due to demand in industry
  - Fluctuating job market in IT sector
  - Lateral entry process
  - More towards Application oriented rather than research oriented

## Elex:

- Strength -
1. Highly qualified & dedicated faculty.
  2. UG and PG both.
  3. Well maintained laboratories in the department.
  4. Student Placement ratio is good.
  5. Flexibility in generating and utilizing funds

- Weakness:
1. Less strength of faculty student teacher ratio 40:1.
  2. Less students with GATE Score card at PG level.
  3. One more UG course started without additional faculty and infrastructure.
  4. Excellence Center is required.
  5. Ph.D registered candidate are less.

### Opportunities:

- 1 R&D and consultancy activities may enhanced.
2. Setting up incubation center.
3. New interdisciplinary PG programmes.
- 4 . Student and faculty exchange programmes with other institutions and industries
5. Financial assistance from funding agencies like DST and AICTE.

### Challenges:

- 1.Preference of students to join institutions with highly qualified faculty
- 2..Other institute setting up such incubation center
3. High financial gain through students fees

4. Obtain deemed university status for the institution at the earliest
5. Attract students with high skill and communication

**Civil :**

**Strengths:** The strengths of the department include:

- (i) Qualified and experienced faculty members.
- (ii) Adequate infrastructure
- (iii) Excellent team work among faculty and students.
- (iv) Good performance of students in examination
- (v) Revised and updated curriculum

**Weakness:** The weakness of the department lies under:

- (i) Inadequate no. of faculty and supporting staff.
- (ii) Lack of PhD research scholars.

**Opportunities:** The department looks forward to grab following opportunities:

- (i) Enhanced R & D consultancy
- (ii) Improved campus placement
- (iii) Starting new courses
- (iv) Increased revenue generation
- (v) Development of faculty and supporting staff
- (vi) Networking with National R & D labs, IIT's.

**Challenges:** The challenges faced by the department are:

- (i) Competency of supporting staff.
- (ii) Employment opportunities for fresh graduates.

**CSE/IT**

Strength	Well Qualified Teaching faculty, Well established laboratories
----------	--

**HUMANTIES-**

**Strengths :**

1. Lack of regular Faculty;
2. The Department manages itself in resources available.

**Weaknesses :**

- It is only a partial UG department;
- Need to take sponsored major/minor research project;

**Opportunities :**

- The Department needs to shift to vocational course in place of traditional ones that are being run now..

**Challenges :**

- **Humanities is the weakest section in an engineering set up and hence requires a lot of attention and remodelling .**

#### APPLIED SCIENCE

##### **Strengths :**

1. Experienced and qualified Faculty;
2. The department nurtures the students to become better engineers of tomorrow.

##### **Weaknesses :**

- It is only a UG department;
- Need to take sponsored major/minor research project;
- Need to start new consultancy activities

##### **Opportunities :**

- Changing scenario of need based learning has created opportunities for teachers of the department to float the courses of their interest for the students of other departments.

##### **Challenges :**

- Catering the students at par with the changing scenario of teaching-learning process.

#### *ELECTRICAL*

##### **STRENGTH**

- Departmental participation in Interdepartmental activities
- Strong Team spirit in the Department
- Experience, Young, dynamic and energetic Faculty and other staff members
- Innovative Project Works by students

##### **WEAKNESS**

- Numbers of PhD holders are less, however, most of the M.Tech qualified Faculty members are pursuing PhD Part time in different universities. Expecting a good no. of PhD within a couple years
- Research facilities in the Department are to be enhanced so that Faculty members can carry out their research works and other research activities in the departmental labs
- Lack of state-of-art laboratory facility on latest technologies.

##### **OPPORTUNITY**

- Upgrading M.Tech qualified faculty to PhD(Engg.)
- Departmental Research facility to be enhanced
- Faculty Motivation Programmes
- Faculty members deputed for specialized training/higher studies
- External Project
- Student Monitoring
- Extra-Curricular Activities

## CHALLENGES

- Competitive environment.
- Industry requirement based syllabus up gradation.
- Substance of quality placement against economics slowdown.

### 39. Future plans of the department.

#### Biotech

- Installation of Bioprocess Laboratory including Desktop Computer Controlled Bioreactor
- Installation of Computational Biology Laboratory with Workstations and Software

#### Chemical

- Develop smart classrooms with interactive teaching aids.
- To promote inter disciplinary research.
- To establish industry / academic interactions or collaborations with Regional /state level/ national / international organizations.
- Improve teaching methodology.
- Improve campus placements for students.
- Recruit more number of qualified faculty and staff.
- To have research tie-ups with national and international reputed institutions.

#### MECHANICAL

- Planning to get funded projects and seminars from government organizations such as DRDO, ISRO, CSIR etc.
- Signing MOU with various universities and companies.
- To Improve the consultancy work through industry interaction.
- To improve the success and placement rate of the students.
- To create the centre of excellence

#### Feed from all stake holders (Student, Alumni, Employer)

Regular alumni meetings are done in the institutes. Department take suggestion from the alumni. We also obtained the feedback from alumni through Email/hard copy.

#### Exit survey

It is an intuitive, comprehensive and analytics resource that allows organizations to survey departing students and receive detailed. we make it easy to get feedback.

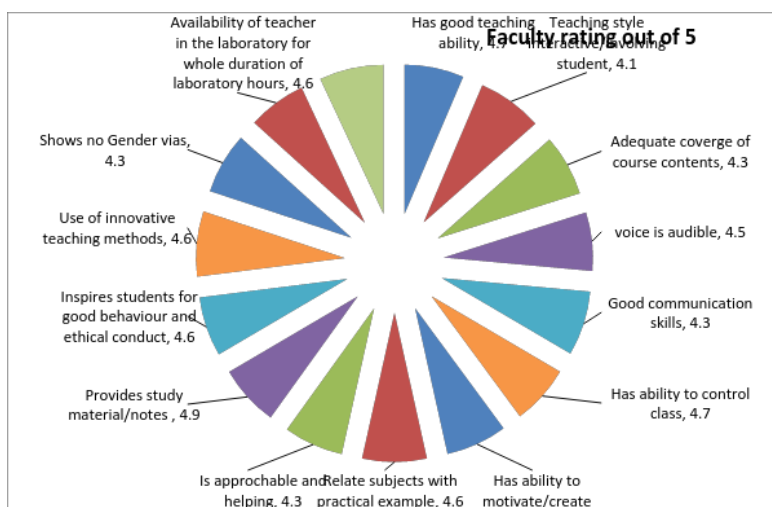
#### Faculty feedback analysis

The department conducts regular meeting as well as class coordinator meeting with all students. After the meeting, the department committee evaluates the feedback forms from the students and based on the evolution report, the concerned faculty are advised to improve upon the areas of improvement and upgrade the teaching learning evaluation process.

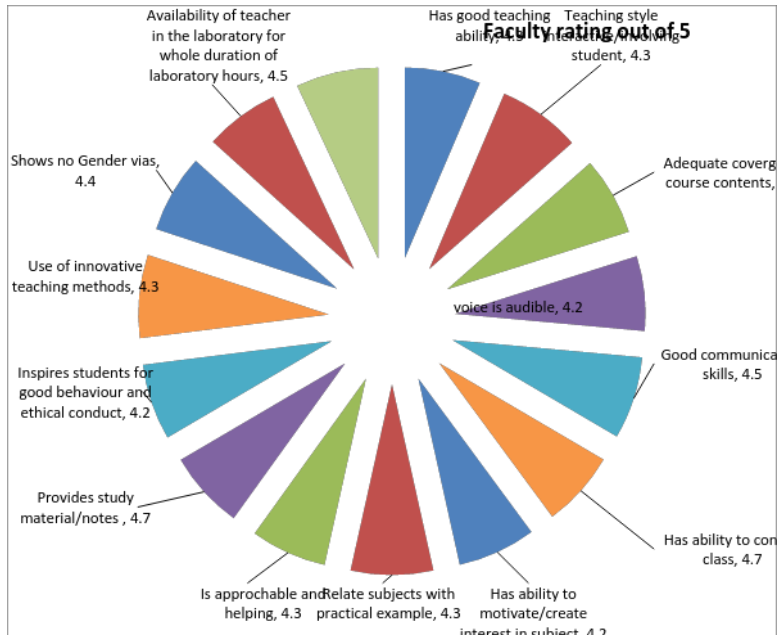
### Faculty Rating out of 5

1. Has good teaching ability
2. Teaching style interactive/involving students
3. Adequate coverage of course content
4. Voice is audible
5. Good communication skills
6. Has ability to control class
7. Has ability to motivate/create interest in subject
8. Relates subject with practical examples
9. Faculty is approachable and helping
10. Provides study material/notes etc
11. Inspires students for good behaviour and ethical conduct
12. Use of innovative teaching methods
13. Shows no gender bias
14. Availability of teacher in the laboratory for whole duration of laboratory hours
15. Helping the students in conducting experiments by giving instructions.

### Session:2013-14

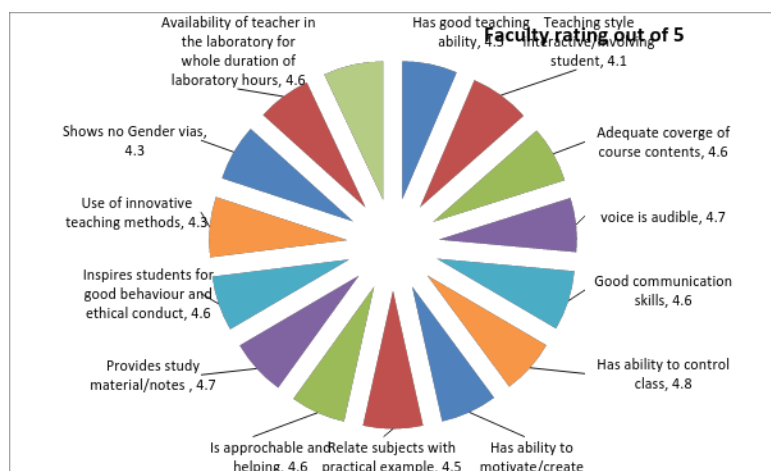


### Session:2014-2015





**Session:2015-2016**



**Remedial classes**

It helps to cover the difficulties of students in subject wise syllabus and learn them through virtual models and animations of processes.

Remedial Classes Sessions-wise	Odd Semester	Even Semester
2014-2015	July-Dec.2014	Jan.-June.2015
2015-2016	July-Dec.2015	Jan.-June.2016
2016-2017	July-Dec.2016	Jan.-June.2017
2017-2018	July-Dec.2017	-

**Motivational classes**

S No	Name	Expert's organization	Topic of lecture	Date of visit from	Date of visit to
1	Dr.C.S.Malvi	MIT	TED Video lecture series on Innovative theme	01.02.2014	01.02.2014
2	SKF team	SKF, India Ltd,Pune	Vibration analysis & bearing	10.09.2014	10.09.2014

			technology		
3	Dr.SainathPawaskar	Sandhiasthi India Ltd.	Mechanical Engg and cross-disciplinary Research:Dawn of a new era	14.07.2014	14.07.2014
4	Er.A.R.Tupe	Indian railway centre for advanced maintenance technology, Gwalior	Bio-Energy	06.03.2014	06.03.2014
5	Er.Arvind Dixit	Advance Tech. Industry	Industry practice for solution approach	29.09.2014	29.09.2014
6	Dr.Vijay Parmar	London,England	Financial Engg& Mathematical Modelling	31.01.2015	31.01.2015
7	Mr.Satish Mangal	Ex.NTPC Ltd. & Technology	Net metering the solar power generation-Innoative methodology.	15.09.2015	15.09.2015
8	Dr.shyamsundar Tiwari	Ret.NuclearScientist,Atomic energy ,GOI	Mechatronics and Automation	26/11/2015	26/11/2015
9	Dr.Sreenivasaraogubba	GE Global Research	Computational Fluid Dynamic(CFD)	18.06.2016	18.06.2016
10	Prof.Bhupendra Pandey	IIT,Bombay	On line MOOC Course	Aug.2016	Aug.2016
11	Dr.S.P.Tiwari	IIT BHU	Advanced Manufacturing System	27.03.2017	27.03.2017
12	Er.C.G.Porwal	NTPC,	Recent Trends in predictive maintenance & its application in turbine generators	25.03.2017	25.03.2017
13	Dr.Rizwan Uddin	PF Commissioner, Gwalior	Motivation	25.03.2017	25.03.2017

			through goal setting		
14	Dr.K.B.Mishra	IIT,Roorkee	Computational Fluid Dynamic(CFD)	27.01.2017	27.01.2017

Our organisation enroll in online courses to learn how to get and stay motivated so you can set and pursue.

### BOS meeting details

The department conducts regular academic assessment in BOS meeting. The continuous curriculum assessment and improvement regularly carried out in the department.

### MOUs

S.No	Title	Agency	Session
1	Vibration analysis & bearing technology	SKF, India Ltd,Pune	2014-15

**Collaborations:NIL**

### Consultancy details

The department provides consultancy service for experimental work.

S.No	Faculty Name	Title of Project	Agency	Period	Grant/Amount in(Rs Lakhs)
1	Dr. C. S. Malvi	Testing of brass coins	Mr Agrawal Trading Company Gwalior	2014	0.02 Lakhs
2	Dr.C.S.Malvi	Testing of brass coins	Mr Divya Trading Company Gwalior	2014	0.02 Lakhs
3	Dr.C.S.Malvi	Solar water Heating System Installation	Cancer Hospital Research Institute Gwalior	2014	0.02 lakhs
4	Dr.C.S.Malvi	Trolley Drawing specification and approval	Shri Mahalaxmi Agro Works,Burahanpur, M.P.	2015	0.08 lakhs
5	Dr.C.S.Malvi	Trolley Drawing specification and approval	M/s Faiz steel works, Bhopal	2015	0.09 lakhs
6	Dr.C.S.Malvi	Trolley Drawing specification and approval	M/s Rajesh Chandresh Agro Industries, Narsingpur	2016	0.12 lakhs
7	Dr.C.S.Malvi	Trolley Drawing	JCBL Limited Lalru,	2016	0.15 lakhs

		specification and approval	Mohali Punjab		
8	Dr.C.S.Malvi	Drawing Checking	RTO, Gwalior	2015-16	0.25 Lakhs
09	Dr.C.S.Malvi	Drawing Checking	RTO, Gwalior	2014-15	0.15 Lakhs
10	Dr.M.K.Gaur	AC Load Calculation	MelaPradhikaran	2015-16	0.10 Lakhs
11	Dr.M.K.Gaur	Performance of I/C Engine	Royal Hyundai	2014-15	0.05 Lakhs
12	Dr.A.K.Sharma	Food Tiffin Dimensions	Collectorate, Gwalior	2014-15	0.05 Lakhs

### GATE/CAT/GRE/TOEFL/ANY OTHER STUDENT DATA COURSE FILES

Personality development training programmes are conducted for third and final year of students so as to equip them for placement. Guidance is given for competitive exams such as GATE,CAT,GRE, etc.

Competitive examinations	Year	Students cleared
GATE	2014-15	22
	2015-16	32
	2016-17	27

### Student project funding

It is a very modest fund to support undergraduate/Post graduate student projects.

Following table shows the financial provision to support different research activities by students.

Events	2013-14(Rs)	2014-2015(Rs)	2015-2016(Rs)	2016-2017(Rs)
BAJA	340900/-	-----	-----	-----
GO-KART	-----	-----	100000/-	-----
EFFI-CYCLE	108000/-	-----	-----	-----
PAPER RECYCLE PLANT	-----	40000/-	-----	-----
WHEEL CHAIR	-----	18000/-	-----	-----

### List of Class coordinator (Last three years)

The department conducts regular meeting as well as class coordinator meeting with all students. Coordinator is responsible for ensuring effective management of a course and delivery of a coherent and relevant curriculum that aligns teaching.

<b>Session 2014-15</b>		
<b>Program</b>	<b>Year</b>	<b>Class Coordinator</b>
BE (ME)	First Year	Prof .Vedansh Chaturvedi
BE (ME)	Second Year	Prof.Jyoti Vimal
BE (ME)	Third Year	Dr.C.S.Malvi
BE(ME)	Fourth Year	Dr.M.K.Gaur/Prof.D.K.Kasdekar
M.Tech(PE)	First Year	Prof.Sharad Agrawal
M.Tech(PE)	Second Year	Dr.A.K.Sharma

<b>Session 2015-16</b>		
<b>Program</b>	<b>Year</b>	<b>Class Coordinator</b>
BE (ME)	First Year	Prof.Vedansh Chaturvedi
BE (AU)	First Year	Prof.Bhupendra Pandey
BE (ME)	Second Year	Dr.Jyoti Vimal
BE (ME)	Third Year	Dr.C.S.Malvi
BE(ME)	Fourth Year	Dr.M.K.Gaur/Prof..AmitAherwer
M.Tech(PE)	First Year	Prof.Sharad Agrawal
M.Tech(PE)	Second Year	Dr.A.K.Sharma

<b>Session 2016-17</b>		
<b>Program</b>	<b>Year</b>	<b>Class Coordinator</b>
BE (ME)	First Year	Prof .D.K.Kasdekar
BE (AU)	First Year	Prof. Vaibhav Shivhare
BE (ME)	Second Year	Prof.Vedansh Chaturvedi
BE (AU)	Second Year	Prof.Bhupendra Pandey
BE (ME)	Third Year	Dr.Jyoti Vimal
BE(ME)	Fourth Year	Prof..AmitAherwer
M.Tech(PE)	First Year	Prof.Sharad Agrawal

M.Tech(PE)	Second Year	Dr.A.K.Sharma
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Session 2017-18		
Program	Year	Class Coordinator
BE (ME)	First Year	Dr. A.K. Sharma
BE (AU)	First Year	Dr. Amit Aherwer
BE (ME)	Second Year	Prof .D.K. Kasdekar
BE (AU)	Second Year	Prof. Vaibhav Shivhare
BE (ME)	Third Year	Prof. Vedansh Chaturvedi
BE (AU)	Third Year	Prof. Bhupendra Pandey
BE(ME)	Fourth Year	Dr. Jyoti Vimal
M.Tech(PE)	First Year	Prof. R.P. Kori
M.Tech(PE)	Second Year	Dr. M.K. Sagar

**Details of Industry/corporate house:**

S. No	Date	Organizations, where visited	Level	Type	Remarks
1	16, October 2016	Prabhat Rai International Murti Kala Kendra - Rairu, Gwalior	PG	Lost Wax Casting Industry	To study the precision instruments manufacturing

**Department lab details with list of equipment's, furniture, safety measures**

**Students laboratories:** Department has various laboratories for UG and PG students like

- Basic Mechanical Engineering Lab
- Kinematics of Machines Lab
- Dynamics of Machines Lab
- Fluid Machines Lab
- Metrology Lab
- Strength of Materials Lab
- Advanced Mechanics of Materials Lab
- IC Engine Lab
- CAD/CAM Lab
- Thermodynamics Lab
- Thermal Engineering Lab
- RAC Lab

- Mechanical Workshop
- SKF Asset and Reliability Training Centre

**Research laboratories:** SKF, Strength of Material, HMT, IC Engine are research laboratory for M. Tech/Ph.D. students.

**Equipment's, furniture:** Equipment's and furniture are equipped as per lab requirement.

**Safety and security rules to be followed in Departmental Practical Lab**

1. Always wear shoes before entering lab.
2. Do not touch anything without the permission of instructor
3. Read carefully the lab manual before performing experiments.
4. Check electrical connections before starting the equipment.
5. Do not put your hands while the machine is in operation.
6. Do not tamper measuring instruments.
7. Do not open the casing of the equipment.
8. Do not unplug any electrical connection.
9. Switch off the power supply to the experimental setup on completion of the experiment.
10. Maintain clean and orderly laboratories and work area.
11. Be aware of the various experiment controls (start button, stop button, speed control) for each equipment.
12. Wear safety eyewear when needed.
- 13 Do not leave experiments running unattended.
- 14 Any injuries should be reported immediately for proper care.

**MCA :**

- The department plans to start an integrated MCA-BCA dual degree programme in future.
- The department also plans to bring more of a research orientation in future.
- Some consultancy and revenue generation activities are planned to be incorporated in future.

**Elex:**

- *Setting up new Lab for Research and Development.*
- *Training programs for faculty and staff.*
- *MOU's with Industries and Reputed Academic Institutions .*
- *Faculty and Staff Qualification up gradation.*
- *Research and Consultancy.*
- *Addition of more infrastructure.*
- *Appointment of new faculty.*

## Civil

- (i) Up – gradation of various research facilities in the department like water & waste water lab also establishment of a diagnostic lab for materials, establishment of GIS lab & Remote Sensing centre and giving more stress on use of software's in curriculum.
- (ii) The department is planning to establish project management cell along with the induction of project management software in UG & PG syllabi and provide outsource training to students on Prima-vera software.
- (iii) The department aims at establishing linkages with reputed Indian/Foreign Universities.
- (iv) The department aims at establishing fully functional research lab for PG & PhD students.
- (v) The department also aims at establishing student chapter like ASCE, ISTE, ICI.
- (vi) The department is planning to develop an entrepreneur cell especially for its students.
- (vii) The department is targeting to organize more Industry Institute interaction program which will benefit its students, faculty & staff.

## CSE/IT

Feed from all stake holders( student, ALUMNI, employer)  
Exit survey  
Faculty feedback analysis

Remedial classes  
Motivational classes

BOS meeting details

**BOS meeting held regularly to review the curriculum as per the Industrial needs.  
During last three years, meeting was held on 4/7/12, 28/6/13, 4/3/14, 26/4/14,1/4/16,  
21/11/2016 ,7/7/2017**

MOUs

- 1. Infosys Camus Connect**
- 2. IBM Centre of Excellence**

Collaborations  
Consultancy details



<b>Association</b>	
Organization/Society	Co-ordinators
IBM Centre of Excellence	Dr. Sanjiv Sharma
Infosys Campus Connect	Dr. Sanjiv Sharma
IIT-bombayx Mooc	Prof. R.R. Singh Makwana
Chapters	
ACM Chapter	Prof. Neha Bhardwaj
CSI Student Chapter	Prof. Neha Bhardwaj
IEEE Student Chapter	Prof. Manish Dixit

GATE/CAT/GRE/TOEFL//ANY OTHER STUDENT DATA  
COURSE FILES

Student project funding

List of Class coordinator (Last three years)

**2017-18**

S.No.	Name of Faculty	Assigned Class
<b>Computer Science &amp; Engineering</b>		
1.	Prof. Manish Dixit Prof. Jaimala Jha*	Final Year
2.	Prof. Neha Bhardwaj Prof. Jamvant Kumare*	Third Year
3.	Prof. Mahesh Parmar Prof. Amit K. Manjhwari*	Second Year
	Dr. Sanjiv Sharma Prof. Rajeev K. Singh*	First Year
<b>Information Technology</b>		
1.	Prof. Khushboo Agarwal	Final Year
2.	Prof. Abhilash Sonker	Third Year
3.	Prof. Rajni Ranjan S. Makwana	Second Year
4.	Prof. Vikas Sejwar	First Year
<b>M.Tech.</b>		
1.	Dr. Akhilesh Tiwari	M.Tech – II Year (All Branch)
2.	Prof. Puneet Kumar Johari	M.Tech – I Year (All Branch)

**2016-17**

S.No.	Name of Faculty	Assigned Class
<b>Computer Science &amp; Engineering</b>		
1.	Prof. Manish Dixit	Final Year
2.	Prof. Sanjiv Sharma	Third Year
3.	Prof. Neha Bhardwaj	Second Year
4.	Prof. Mahesh Parmar	First Year
<b>Information Technology</b>		
1.	Prof. R.R.Singh	Final Year

2.	Prof. Vikas Sejwar	Third Year
3.	Prof. Abhilash Sonker	Second Year
4.	Prof. Vikas Sejwar	First Year
<b>M.Tech.</b>		
1.	Dr. Akhilesh Tiwari	M.Tech – II Year (All Branch)
2.	Prof. Puneet Kumar Johari	M.Tech – I Year (All Branch)

**2015-16**

S.No.	Name of Faculty	Assigned Class
<b>Computer Science &amp; Engineering</b>		
1.	Prof. Manish Dixit	Final Year
2.	Prof. Jaimala Jha	Third Year
3.	Dr. Sanjiv Sharma	Second Year
4.	Dr.Preeti Gupta	First Year
<b>Information Technology</b>		
1.	Prof. Khushboo Agarwal	Final Year
2.	Prof. Vikas Sejwar	Third Year
3.	Prof. Abhilash Sonker	Second Year
4.	Dr. Anjula Gaur	First Year
<b>M.Tech.</b>		
1.	Dr. Akhilesh Tiwari	M.Tech – II Year (All Branch)
2.	Prof. Puneet Kumar Johari	M.Tech – I Year (All Branch)

Details of Industry/corporate house

Department lab details with list of equipments ,furniture, safety measures

**\*\*Note provide information for last five years along with supporting data**

#### HUMANITIES

- **Need to start PG Course**

Feed from all stake holders (student, ALUMNI, employer)

- **NA**

Exit survey

- **N/A**

Faculty feedback analysis

- **Maintained by core Departments.**

Remedial classes

- **Yes, arranged time to time**

Motivational classes

- **Arranged time to time**

BOS meeting details

- **Interactions with prominent academicians are held regularly through BOS meetings to design an effective syllabi from the students' point of view.**

- **Revision of the syllabi under its BOS, from time to time so that the students could meet the changing demands and expectations of the industries.**

MOUs

- **NIL**

Collaborations

- **NIL**

Consultancy details

Nil/NA

GATE/CAT/GRE/TOEFL//ANY OTHER STUDENT DATA COURSE FILES

- **NIL**

Student project funding

- **NIL**

List of Class coordinator (Last three years)

**NA**

Details of Industry/corporate house

- **NIL**

Department lab details with list of equipments, furniture, and safety measures

- **List of some Major Equipments**

**1. Computers**

- a. 18 Pentium IV with 20 GB HDD and 15" LCD/LED Monitor**
- b. 11 i5 with 17" LCD/LED Monitor**

**2. Furniture**

- a. 15 [15X3] Computer Tables**
- b. 30 Revolving chairs**
- c. 11 PVC Chairs**

**3. Software**

- a. Words Worth Language lab for 100 Nodes**
- b. Cambridge English Resources**
- c. Advanced Learner's Dictionaries both Cambridge and Oxford**

## **ELECTRICAL**

1. To further intensify the academic activities to reach every student of the department from the very First Year and to secure a bright future and Career pathways for 100% of the students.
2. To prepare the students for Personality Tests and Interviews through a) conducting GD/ Seminars effectively, b) organizing National/ International level Conferences/ workshops/ Seminars etc.
3. To update their knowledge through expert lectures by eminent scholars from higher level institutions and industry personnel.
4. To upgrade/ modify the syllabi as per the needs of modern industries.
5. To improve the interaction with alumni and institute-industry-interaction for better placement of students.

6. Provide better opportunities for our faculty and students to engage in Professional consultancy services to the government as well as multinational sectors.
7. To encourage the students to become entrepreneurs.

## APPLIED SCIENCE

- Need to start PG Course

Feed from all stake holders (student, ALUMNI, employer)

- The Department takes regular feedback from the students time to time.

Exit survey

- N/A

Faculty feedback analysis

- There are in all 12 faculties in the department as under. All the above faculties in the department have a sound technical knowledge are engaged at teaching various levels of Engineering (UG level) and PG level (Mathematics papers). As per the feedback report compiled during the academic session 2016-17, all the faculties are found to impart sound subjective knowledge to the students in the institute through dedicated and sincere teaching.

Remedial classes

- Yes, arranged time to time

Motivational classes

- Arranged time to time

BOS meeting details

- Interactions with prominent academicians are held regularly through BOS meetings to design an effective syllabus from the student point of view.
- Revision of the syllabi under its BOS, from time to time so that the students could meet the changing demands and expectations of the industries.
- Applied Physics

S. No.	Name of Expert	Designation	Affiliation	Year
1	Dr. Pankaj Shrivastava	Associate Professor	ABV-IIITM, Gwalior	2011-2012
2	Dr. Pankaj Shrivastava	Associate Professor	ABV-IIITM, Gwalior	2013-2014
	Dr. S.S. Chauhan	Professor	Alumni MITS, Gwalior	
3	Dr. Nagendra Chaturvedi	Professor & Head	Govt. Science College, Gwalior	2015-2016
	Dr. D.C. Gupta	Associate Professor	SOS, Jiwaji University, Gwalior	
4	Dr. Nagendra Chaturvedi	Professor & Head	Govt. Science College, Gwalior	2016-2017
	Dr. D.C. Gupta	Associate Professor	SOS, Jiwaji University, Gwalior	

- Applied Chemistry

S. No.	Name of Expert	Designation	Affiliation	Year
1	Dr. R.N.Shukla	Professor	SATI Vidisha	2011-2012
	Dr. Y.K.Agarawal	Joint Director	DTE, Bhopal	
2	Dr. S.K.Srivastava	Professor & Head	SOS, Jiwaji University, Gwalior	2013-2014

3	Dr. S.K.Srivastava	Professor & Head	SOS, Jiwaji University, Gwalior	2015-16
	Dr. Sadhna Shrivastava	Professor	Govt. SLP College, Morar, Gwalior	
4	Dr. A.K. Singh	Professor	RGPV Bhoapl	2015-16
	Dr. S.K.Srivastava	Professor & Head	SOS, Jiwaji University, Gwalior	
	Dr. Sadhna Shrivastava	Professor	Govt. SLP College, Morar, Gwalior	
5	Dr. A.K. Singh	Professor	RGPV Bhoapl	2016-17
	Dr. S.K.Srivastava	Professor & Head	SOS, Jiwaji University, Gwalior	
	Dr. Sadhna Shrivastava	Professor	Govt. SLP College, Morar, Gwalior	

• Applied Mathematics

S. No.	Name of Expert	Designation	Affiliation	Year
1	Dr. Renu Jain	Professor	SOS, Jiwaji University, Gwalior	2011-2012
2	Dr. S.K. Verma	Professor	Indira Gandhi Govt Engg. College, Sagar (Alumni MITS Gwalior)	2013-2014
	Dr. Avinish Kumar	Associate Professor	Bundelkhand University, Jhansi	
3	Dr. R.N. Gupta	Professor	Govt. SLP College, Morar, Gwalior	2015-16
	Dr. Rajendra Dubey	Professor	SATI, Vidisha	
	Dr. Anil Goyal	Professor	RGPV, Bhopal	
4	Dr. Shailesh Jalori	Professor	SATI, Vidisha	2015-16
	Dr. Anil Goyal	Professor	RGPV, Bhopal	
	Dr. R.N. Gupta	Professor	Govt. SLP College, Morar, Gwalior	
5	Dr. R.N. Gupta	Professor	Govt. SLP College, Morar, Gwalior	2016-17
	Dr. Rajendra Dubey	Professor	SATI, Vidisha	

MOUs

- NIL

Collaborations

- NIL

Consultancy details

- Chemistry (oil testing/water testing /metal testing)
- Detail of five years oil testing/water testing /metal testing etc

S.No.	Year	Revenue Earned in Rs.
1	2012-2013	Rs. 30,122/-
2	2013-2014	Rs. 8,542/-
3	2014-2015	Rs. 47,662/-

4	2015-2016	Rs. 2,746/-
5	2016-2017	Rs. 62,861/-

GATE/CAT/GRE/TOEFL//ANY OTHER STUDENT DATA  
COURSE FILES

- NIL

Student project funding

- NIL

List of Class coordinator (Last three years)

- List of Ist year Class co-ordinator session (2014-15)

Name of Co-ordinator	Name of Branch
Dr. Shourabh Bhattacharya and Shri Sanjay Singh	Mechanical Engg.
Dr. Deepti Jain and Ms. Shweta Shrivastava	Civil Engg.
Mr. Ankur Jain and Mr. D K Mishra	Computer Science Engg.
Dr. Anjula Gaur and Dr. Poonam Gour	Electronics Engg.
Dr. D.K. Jain and Prof Jitendra Kumar	Electrical Engg.
Dr. V P Shinde	Bio Tech.
Dr Peeti Gupta	Chemical Engg.
Angad Ojha	Information Tech.

- List of Ist year Class co-ordinator session (2015-16)

Name of Co-ordinator	Name of Branch
Mr. D K Mishra	Mechanical Engg.
Mr Angad Ojha/ Ankur Jain	Civil Engg.
Dr Peeti Gupta	Computer Science Engg.
Dr. D.K. Jain	Electronics
Dr. S Bhattacharya	Electrical Engg.
Ms. Shweta Shrivastava	Chemical Engg. and Bio Tech.
Dr. Anjula Gaur	Information Tech.

Mr J K Mutehele	Automobile Engg.
Dr. V P Shinde	Electronics and Telecommunication Engg.

- List of Ist year Class co-ordinator session (2016-17)

Name of Co-ordinator	Name of Branch
Mr. J K Mutehele	Mechanical Engg.
Mr Angad Ojha	Civil Engg.
Dr. Anjula Gaur	Computer Science Engg.
Dr. V P Shinde	Electronics
Dr. D.K. Jain	Electrical Engg.
Dr Uday Pratap Singh	IT and Bio Tech.
Dr. S Bhattacharya	Automobile Engg.
Dr Uday Pratap Singh	Chemical Engg. & Electronics and Telecommunication Engg.

Details of Industry/corporate house

- NIL

Department lab details with list of equipments, furniture, and safety measures

- List of some Major Equipments

S.No.	Name of Equipments
1	UV-Spectrophotometer
2	Spin Coater Unit
3	Electric Field Mill
4	Bomb Calorimeter
5	Pensky Martin Apparatus
6	Viscosity Bath –PID Cntroller
7	Resolving Power of Telescope
8	Dielectric Constant
9	Plank's Constant
10	Balmer Series & rydberg Constant
11	Photoconductivity experiment
12	Viscosity of Glycerin
13	Auto pensky martins closed cup flash point tester.
14	Kinematic Viscosity baths

15	Digital Pensky Martin Apparatus
16	Digital Kinematic Viscometer

- The department is having suitable furniture for performing of the experiments and seating arrangement for faculties during lab session.
- The department has a First Aid kit for emergency purposes and fire extinguishers.



## List of Publications

# Chemical

**Dr. S. Prasad**

### **International Journals:**

1. A Right Exponent in a Correlation used for calculation of bed expansion ratio was suggested for which an article was published in AIChE Journal. October 1987, Vol-33, No. 10, Page 1734.
2. Isolation of *Aspergillus flavus* from stored food commodities and *Thymus vulgaris* (L.) essential oil used as safe plant based preservative. *Pharmacognosy Magazine*, Vol – 4, Issue 20, Oct – Dec, 2009 (An official publication of Pharmacognosy Network Worldwide )
3. Antimicrobial activity of probiotic microorganisms from probioticated carrot juice against selective pathogenic strains. *International Journal of Sceintific and Engineering Research*, Volume 4, Issue 8, August-2013.
4. Optimization of fermentation media composition of *ganoderma lucidum* for improved production of antioxidant and antimicrobial compounds. *Pharmacognosy Communications*, vol. 4. Issue 1, Jan-March 2014.
5. LARGE EDDY SIMULATION: AN APPROACH TO SIMULATE NON PREMIXED AND PARTIALLY PREMIXED NATURAL GAS COMBUSTOR” published in the journal named *Emerging Trends in Chemical Engineering(STM)*, ISSN: 2349-4786,vol.2, issue 1.March2015.
6. STUDY OF NATURAL GAS COMBUSTOR USING SPECIES TRANSPORT MODEL” published in the journal of Academic Science named *International journal of computer and mathematical sciences (IJCMS)* ISSN 2347-8527, vol.4 issue 2, Feb-2015.
7. INVESTIGATION OF BUBBLE COLUMN HYDRODYNAMICS USING CFD SIMULATION (2D) in the journal named *Contemporary Research in India* (ISSN 2231-2137) vol.4, issue 3.Sept2014.
8. MODELLING OF NON- PREMIXED METHANE BERL COMBUSTOR THROGH CFD APPRAOCHES AND PREDICTION OF METHANE BURNING” published in the journal named *International Journal of Latest Technology in Engineering Management and Applied Sciences*, ISSN: 2278-2540, vol.3, Issue12, Dec-2014.
9. PREDICTION OF NO<sub>x</sub> CONTENT IN NATURAL GAS COMBUSTOR BASED ON SPECIES TRANSPORT MODEL published in the journal named *International Journal Of Engineering And Technical Research9IJETR*) ISSN:2321-0869,vol. 2, Issue-12, DEC-2014.

### **National Journals:**

1. A mathematical model for coal combustion in a fluidized bed combustor: Particle size distribution effect. *Indian Journal of Engineering & Material Sciences* Vol – 2, October 1995 pp. 224 – 230.
2. Computer Simulation of The Performance of 10 MW Fluidized – Bed Coal Combustion Power Plants. Published in *Indian Chemical Engineer*, Jan – June 1993, Vol – 35, No. – 1 & 2, Page (40 – 51).
3. Role of Momentum Exchange Coefficient in CFB – *Indian Journal of Chemical*

Technology, May 2007, Vol. 14, pp 258 -262.

4. Commercial Development of Channel Black from Natural Gas. This paper was published in Research and Industry: A CSIR Publication (1987).
5. Fluidized – Bed Firing of N. E. Coals. This paper was published in Engineering Symposium Series – 1984. ( Organized by Tea Research Association, Jorhat).
6. Combustion of High Sulfur Coals in Fluid Bed – Pilot Plant Studies. The paper was presented in an International Seminar on Frontier Areas (ISOFA – 1986) (Organized by RRL Jorhat).
7. Efficiency Tuning of Combined cycle power plant: chemical engineering world, Vol – XXXIII, No. – 2, Feb 1998, page (57 – 59).
8. “Selection Criteria of feed size of coal for maximum combustion efficiency in fluidized bed coal combustor”, Chemical Engg. World, April, 2003, Vol. 38, No. 4, page No. 58 – 60.
9. “Fluidized Bed Systems – Design of Air Distributor Plate”, Chemical Engg. World, July 2003, page 71 – 73.
10. Power plant in India: “Integrated Coal Gasification Combined Cycle”, Chemical Engg. World, Sept 2004, Page 60 – 61.

**Conferences:**

1. Detailed Process Report prepared submitted to North – Eastern Council on Fluidized – Bed combustion (High Sulphur Coal).
2. Delivered special lectures on general approach to process plant simulation. Organized by Southern Petrochemical Industries Corporation (SPIC) at Madras and Tuticorin for their practicing engineers ( for M.S. in Engineering Management) 26 -27<sup>th</sup> Sept, 1992.
3. Simulation of Fluidized – Bed (Bubbling Type) Coal Combustor. As an invited lecture, Organized by the Department of Chemical Engg, IIT Bombay, 7<sup>th</sup> Oct, 1993.
4. An appropriate Technology for Commercial Development of N.E. Region Coal. The paper was presented in a seminar organized by Indian Institute of Chemical Engineers (Guwahati Centre), March 14, 1984.
5. Simplified Carbon Inventory Calculation in Operation FBC. This paper was presented in a seminar organized by BITS Pilani, March 27, 1991.
6. Management of R & D Activity in Technical Institutions. This paper was presented in a workshop on Institutional Management organized by ISTE Chapter of Rural Engg. College, Bhalki from 21<sup>st</sup> to 23<sup>rd</sup> June 1995.
7. A Design Package was prepared on ‘Production of Channel Black from Natural Gas’ for Assam Gas Company, Duliajan.
8. Participated in Symposium organized by German Democratic Republic (GDR) at SCIR New Delhi 1983, on ‘Coal Processing Technology’.
9. Participated in “National Workshop” on Risk & Safety Management in Process Industries, Sept, 19<sup>th</sup> to 20<sup>th</sup>, 1997, organized by IChE, NSC, LPA at KREC, Surathkal.
10. Delivered on the topic “Spot Light on Chemical Engineering” in a national seminar organized by Deptt. of Higher Education (M.P.) Bhopal at VRGG, PG, College, Morar (Gwl.) M.P.), Feb.14<sup>th</sup> – 15<sup>th</sup>, 2003.
11. Delivered on the topic Coal combustion devices in National Level Symposium – Fussitech – 2005 at ITM, Gwalior.
12. Delivered on the topic Chemical Industries around Gwalior organized by KVIC & EDC Cell MITS, Gwalior in a workshop “Leather Industries Gwalior” on 15 Nov, 2005.
13. Attended a conference as an M.P. Govt. nominee for three days from 21<sup>st</sup> to 23<sup>rd</sup> March 2003 at Vigyan Bhawan, Taj Palace & Hayat Regency in New Delhi. It was a global summit on Knowledge Millennium III Business of Bio – Tech. The

Hon'ble President of India, Dr. A.P.J. Abdul Kalam inaugurated the summit. The millennium address was given by Dr. J. Craig Ventor, former president of Celera Genomics, USA & currently president of the centre for advancement of Genomics, USA.

14. Paper presented on the topic Computer Aids for Chemical Engineering Profession in a conference on services through IT enabled systems organized by IETE Gwalior sub center & CSI Gwalior Chapter, 19 – 20 April, 2003 at DRDE, Gwalior.

### **Prof. S. S. Trivedia**

#### **International Journals:**

1. Hanit Kumar Thapak, Sumint Singh Trivedia, Laxmikant Pandey, "Tea Waste Adsorbent for the Removal of Chromium and Copper from Synthetic Wastewater" , International Journal for Innovative Research in Science & Technology, Volume 2, Issue 02, July 2015, ISSN 2349-6010.
2. Akanksha Jadon and Sumint Singh Trivedia, "Extraction of Essential Oil from Eucalyptus Umbellata Leaves through Microwave Assisted Extraction with Optimize the Operating Conditions", International Journal of Engineering and Management Research, Volume-5, Issue-3, PP 280-283, June-2015.
3. Pragati, Sumint Singh Trivedia, Laxmikant Pandey, "Removal of Zinc from Synthetic Waste Water By Saw Dust As An Adsorbent" International Journal of Innovative Science, Engineering & Technology, Vol. 2 Issue 6, June 2015.

#### **National Journals:**

1. Hanit Kumar Thapak, Sumint Singh Trivedia, Laxmikant Pandey, "Removal of Chromium (VI) from Synthetic Waste Water using Tea waste as a Low Cost Adsorbent" Journal of Water Pollution & Purification Research (ISSN: 2394-7306) Volume 2, Issue 2, 2015.
2. Hanit Kumar Thapak, Sumint Singh Trivedia, Laxmikant Pandey, "Removal of Copper from Synthetic Wastewater by Tea Waste Adsorbent Journal of Water Pollution & Purification Research (ISSN: 2394-7306) Volume 2, Issue 2, 2015.

## **Declaration by the Head of the Institution**

I certify that the data included in this Self-study Report (SSR) are true to the best of my knowledge. This SSR is prepared by the institution after internal discussions, and no part there of has been out sourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

**Signature of the Head of the institution with seal:**

**Place:**

**Date**