

A
Report

On

ACADEMIC AUDIT
FEB 2020



Internal Quality Assurance Cell



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Race Course Road, Gola Ka Mandir, Gwalior, M.P. 474005

Website: www.mitsgwalior.in

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Ref. No. 371

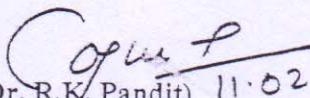
Date: 11.02.2020

ORDER

An Academic Audit will be conducted, on Saturday 22nd February and 29th February, 2020. The HoDs, class/other coordinators, and the faculty members are required to keep all necessary information ready, according to the format already available with the departments, for timely completion of this activity.

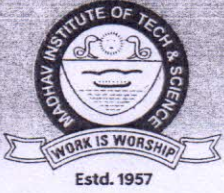
The departments must keep documentation of all activities arranged neatly in separate files, ready for review by the External Auditors by 21st February, 2020.

* Schedule of the Audit will be communicated in due course of time.


(Dr. R.K. Pandit) 11.02.2020
Director

Copy to:

1. All the Heads of the Department
2. Director Office



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

2

Ref: 401

Date: 17th February 2020

To,

Dr. Murtaza Ali Saloda
Professor & Head
Mechanical Engineering Department
CTAE, MPUAT
Udaipur 313001

Dear Sir,

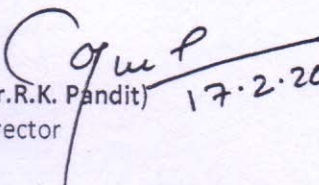
An Academic Audit is to be conducted in the Institute for all teaching departments on 22nd and 29th February 2020 by the Internal Audit Committee of the Institute. I am pleased to appoint you as External Auditor for the activity. *on 29th Feb' 2020.*

TA/DA/ Honorarium will be paid as per Institute norms.

Please confirm your willingness and availability on above dates.

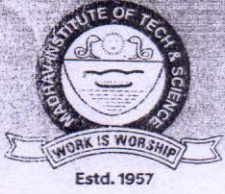
Thanking you,

Yours sincerely


(Dr.R.K. Pandit) 17.2.2020
Director

Copy to :

1. Dean (Academics), MITS, Gwalior.



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

Ref: 400

Date: 17th February 2020

To,

Prof. Devendra Kumar Chaturvedi
Professor, Department of Electrical Engg.
Dayalbagh Educational Institute
(Deemed University), Dayalbagh
Agra-282005, U.P

Dear Sir,

An Academic Audit is to be conducted in the Institute for all teaching departments on 22nd and 29th February 2020 by the Internal Audit Committee of the Institute. I am pleased to appoint you as External Auditor for the activity on 29th Feb '2020.

TA/DA/ Honorarium will be paid as per Institute norms.

Please confirm your willingness and availability on above dates.

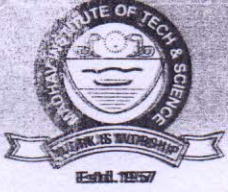
Thanking you,

Yours sincerely

(Dr.R.K. Pandit)
Director

Copy to :

1. Dean (Academics), MITS, Gwalior.



MAHARAJA INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal, M.P.)

Gola ka Mandir, Gwalior (M.P.)- 474 005, INDIA

Ph.: +91-751-2408300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

Ref: 402

Date: 17th February 2020

To,

Dr.Sushil Kumar Mittal
B-30, Sagar Garden Homes
Chuna Bhatti, Kolar Road
Bhopal- 462 016

Dear Sir,

An Academic Audit is to be conducted in the Institute for all teaching departments on 22nd and 29th February 2020 by the Internal Audit Committee of the Institute. I am pleased to appoint you as External Auditor for the activity.

TA/DA/ Honorarium will be paid as per Institute norms.

Please confirm your willingness and availability on above dates.

Thanking you,

Yours sincerely

(Dr.R.K. Pandit)
Director

R.K. Pandit
17.2.2020

Copy to :

1. Dean (Academics), MITS, Gwalior.



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Ph.: +91-751-2409300, Fax: +91-751-2664684, e-mail: director@mitsgwalior.in, website: www.mitsgwalior.in

Ref: 418

Date: 19th February 2020

To,

Dr. Deepak Nagaria
Professor
Department of Electronics & Communication Engineering
BIET, Jhansi, U.P.

Dear Sir,

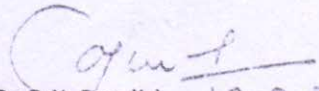
An Academic Audit is to be conducted in the Institute for all teaching departments on 22nd and 29th February 2020 by the Internal Audit Committee of the Institute. I am pleased to appoint you as External Auditor for the activity on 22nd February 2020.

TA/DA/ Honorarium will be paid as per Institute norms.

Please confirm your willingness and availability on above dates.

Thanking you,

Yours sincerely


(Dr.R.K. Pandit)
Director

19.2.2020

Copy to :

1. Dean (Academics), MITS, Gwalior.

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MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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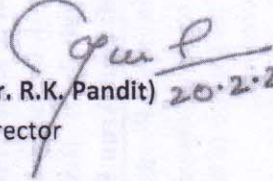
No. 431

Date: 20.02.2020

ORDER

A committee of following is constituted to conduct the Academic Audit of various departments of the Institute on 22nd & 29th February, 2020.

1. Dr. R.K. Gupta
2. Dr. Sulochana Wadhvani
3. External Expert-1
4. External Expert-2


(Dr. R.K. Pandit) 20.2.2020
Director

Copy to:-

1. All Concerning Members
2. Dean (Academics)
3. Director Office

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MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)


Ref. No. 429

Academic Audit 22nd & 29th February, 2020

Date 20/2/2020

Schedule of Visit

| Date | | |
|----------------------|---------------------------------|-------------------------|
| Saturday, 22.02.2020 | | |
| S.No. | Name of Department | Time Slot |
| 1. | Civil Engineering | 10.00 a.m. – 11.00 a.m. |
| 2. | Electrical Engineering | 11.00 a.m. – 12.00 p.m. |
| 3. | Applied Science | 12.00 p.m. – 1.00 p.m. |
| LUNCH | | |
| 4. | Mechanical Engineering | 2.00 p.m. – 3.00 p.m. |
| 5. | Automobile Engineering | 3.00 p.m. – 4.00 p.m. |
| 6. | Chemical Engineering | 4.00 p.m. – 5.00 p.m. |
| Date | | |
| Saturday, 29.02.2020 | | |
| 7. | Electronics Engineering | 10.00 a.m. – 11.00 a.m. |
| 8. | Electronics & Telecommunication | 11.00 a.m. – 12.00 p.m. |
| 9. | Architecture | 12.00 p.m. – 1.00 p.m. |
| LUNCH | | |
| 10. | Computer Science & Engineering | 2.00 p.m. – 3.00 p.m. |
| 11. | Information Technology | 3.00 p.m. – 4.00 p.m. |
| 12. | Humanities | 4.00 p.m. – 5.00 p.m. |


(Dr. R.K. Pandit)
Director

1. All the Heads of the Department
2. Director Office



MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

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Results of Academic Audit

Date - (22.02.2020 & 29.02.2020)

Engineering & Other Departments

| Criterion | CIVIL | MECH. | AUTOMO. | ELECT. | ELEX. | ET | CSE | IT | CHEM. | APP. SCI. | HUMANI. | ARCHITE. |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Criterion I: Availability of Records & Data Management | 46 | 54 | 53 | 46 | 49 | 42 | 43 | 45 | 46 | 43 | 38 | 41 |
| Rank (Criterion - I) | IV | I | II | IV | III | VII | VI | V | IV | VI | IX | VIII |
| Criterion II: Teaching Learning Practices | 61 | 65 | 44 | 62 | 60 | 45 | 62 | 67 | 43 | 34 | 30 | 62 |
| Rank (Criterion - II) | IV | II | VII | III | V | VI | III | I | VIII | IX | X | III |
| Criterion III: Quality Improvement Initiatives | 49 | 72 | 39 | 63 | 46 | 41 | 68 | 76 | 43 | 44 | 33 | 46 |
| Rank (Criterion - III) | V | II | IX | IV | VI | VII | III | I | VIII | VII | X | VI |
| Total Points Obtained | 156 | 191 | 136 | 171 | 155 | 128 | 173 | 188 | 132 | 121 | 101 | 149 |
| Aggregate Points# (Total applicable Parameters for BE Civil, Mech., Elect., Elex., CSE & IT = 50; Automo., ET & Chem. = (50-3 = 47); Applied Science (50-12 = 38); Humanities (50-13 = 37) and Architecture = (50-1 = 49) | 250 | 250 | 235 | 250 | 250 | 235 | 250 | 250 | 235 | 190 | 185 | 245 |
| Percentage | 62.40 | 76.40 | 57.87 | 68.40 | 62.00 | 54.47 | 69.20 | 75.20 | 56.17 | 63.68 | 54.59 | 60.82 |
| Rank (Overall) | VI | I | IX | IV | VII | XII | III | II | X | V | XI | VIII |

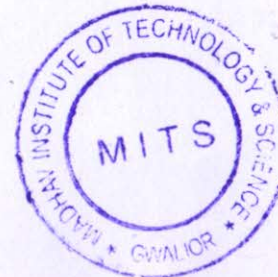
Based on applicable parameters

Compiled By :

(Mrs. Rajni Sharma)

Instructor

M. Pandit
02/03/2020
(Dr. Manjaree Pandit)
(Dean Academic)



(Dr. R.K. Pandit)

Director

Madhav Institute of Technology & Science
Gwalior - 474002 (M.P.)

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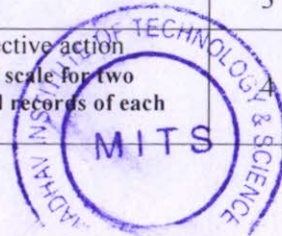


REPORT OF ACADEMIC AUDIT

Date - (22.02.2020 & 29.02.2020)

| S. No. | Name of the Department Date: 22.02.2020 & 29.02.2020 | CIVIL | MECH. | AUTOMO. | ELECT. | ELEX. | ET | CSE | IT | CHEM. | APPLIED SCIENCES | HUMANI. | ARCHITE. |
|---|--|-------|-------|---------|--------|-------|----|-----|----|-------|------------------|---------|----------|
| Criterion I: Availability of Records & Data Management | | | | | | | | | | | | | |
| 1 | Time Table File (Master, Class, Faculty, Lab, Staff) | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 2 | Question paper analysis report (End/mid-term & action taken) | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 3 | Files of various Departmental Coordinators (List of Departmental Coordinators./Incharge assigned by Deptt. for various activities and record of assigned task) | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 2 | 3 | 3 | 4 |
| 4 | Compilation of quarterly e-news letter (Availability on deptt. page on Institute website) | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 4 |
| 5 | Result Analysis & action taken report | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 |
| 6 | CO & CO attainment for academic year 2017 - 18 for all courses (Actions taken for improvement where COs fall below the target) | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 |
| 7 | PO & PSO attainment for academic year 2017-18 | 5 | 5 | 4 | 5 | 4 | 3 | 2 | 4 | 4 | N.A. | N.A. | N.A. |
| 8 | Status of department page on institute website (Uploading of achievements, photos, up to date information for branding and marketing of the department) | 4 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 4 |
| 9 | Analysis & action taken reports on previous Audit reports | 3 | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 |
| 10 | List of departmental files, maintenance of general records | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 |
| 11 | Faculty feedback analysis/Corrective action (Computation of FFI on a 5 point scale for two feedbacks in each semester, signed records of each faculty) | | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |

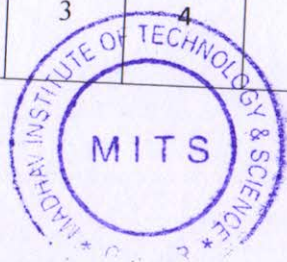
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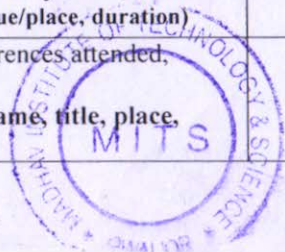
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|--|---|---|---|------|---|---|------|---|---|------|------|------|---|
| 12 | Minutes of meetings of department | 5 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 3 |
| Criterion II: Teaching Learning Practices | | | | | | | | | | | | | |
| 13 | Course Files including MOODLE attendance records, Lecture Plan, Sample Mid-Sem A/Bs | 3 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 3 | 5 |
| 14 | Availability of course material on MOODLE Lecture Plans, Syllabus, Notes, PPTs, Unit Wise Question Banks, Previous year papers, Gate oriented questions, Attendance, etc.) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 |
| 15 | Records of MOODLE utilization, analysis of on-line quiz, assignments on MOODLE, its evaluation (MWI) (Any other innovative teaching methods in practice) | 5 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 |
| 16 | Allotment of B.E./B.Arch./MCA projects (List, classification, assessment & evaluation tools) | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | N.A. | N.A. | 4 |
| 17 | Allotment of M.E. dissertation topics (List, classification, assessment & evaluation tools) | 3 | 4 | N.A. | 4 | 4 | N.A. | 3 | 4 | N.A. | N.A. | N.A. | 4 |
| 18 | Dissertation presentation records-ME/M. Tech./M.Arch. | 5 | 4 | N.A. | 4 | 4 | N.A. | 3 | 4 | N.A. | N.A. | N.A. | 4 |
| 19 | Lab manuals/instruction sheets given to students | 5 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | N.A. | N.A. | N.A. | 3 |
| 20 | Lab records of students/Report made by students | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 3 |
| 21 | Lab utilisation/access register/record | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 |
| 22 | Seminar presentation records-ME/M. Tech/M.Arch (List of topics, mode of conduction) | 4 | 4 | N.A. | 4 | 4 | N.A. | 4 | 3 | N.A. | N.A. | N.A. | 4 |
| 23 | Records of SWAYAM/NPTEL courses conduction (Attendance, evaluation, award of marks) | 4 | 3 | 2 | 4 | 4 | 3 | 4 | 4 | 4 | N.A. | N.A. | 4 |
| 24 | Number of faculty members registered for SWAYAM/NPTEL Course/ Number who cleared exam and Earned credits | 5 | 3 | 0 | 3 | 4 | 4 | 4 | 4 | 3 | 5 | 4 | 4 |
| 25 | Criteria for awarding Internal marks (Records) | 2 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 5 | 4 | 4 |
| 26 | Collaborations established with industry, institute, research organization & activities conducted | 2 | 3 | 1 | 2 | 2 | 1 | 5 | 5 | 0 | 1 | 0 | 1 |
| 27 | Annual Success Index, with /without backlog (Number of students who have graduated from the program with/without backlog)/(Number of students admitted in the first year of that batch and actually admitted in 2nd year via lateral entry) | 3 | 4 | 4 | 3 | 2 | 3 | 3 | 4 | 4 | N.A. | N.A. | 3 |

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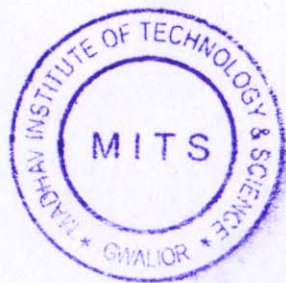
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| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|------|------|---|
| 28 | Academic Performance Index of last 3 years (Mean of 2nd year CGPA of all successful students) x (Number of successful students/Number of students appeared in the examination) Successful students: Those who proceed to the third year | 2 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 3 | N.A. | N.A. | 3 |
| 29 | Placement Index = (Number of students placed on/off campus + Students who went for higher studies + started their own business)/Total final year students | 3 | 4 | 2 | 3 | 3 | 3 | 5 | 5 | 3 | N.A. | N.A. | 5 |
| Criterion III: Quality Improvement Initiatives | | | | | | | | | | | | | |
| 30 | Curriculum development (BoS files, minutes of workshops, meeting, feedback of stakeholders) | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 |
| 31 | New equipment/facilities created/labs developed | 3 | 4 | 0 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 3 | 3 |
| 32 | Record of students' participation in extra & co- curricular activities within and outside the Institute | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | N.A. | N.A. | 3 |
| 33 | Available Professional Societies/chapters and Technical events conducted under Societies. Chapters (Name of chapter, List of student members, list of activities conducted & number of participants) | 4 | 3 | 3 | 4 | 2 | 2 | 4 | 4 | 2 | 2 | 1 | 3 |
| 34 | Records of attendance of Remedial classes, counselling (Impact analysis and measures for improvements) | 2 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 3 |
| 35 | Records & report of Industry visits/tours | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 4 | 0 | N.A. | N.A. | 3 |
| 36 | Events and activities conducted by the department (Workshop/FDPs/Seminar/Training etc.) | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 4 | 3 | 3 | 3 | 1 |
| 37 | Extension activities conducted at the department level (Format: Title, collaborating agency such as NGO, Govt. Organizations, Red cross, industry, community clubs and organizations if any, number of teachers involved, no. of students participated, separate count for Male/Female in case of Gender Equity activities) | 2 | 4 | 4 | 3 | 2 | 3 | 3 | 4 | 2 | 3 | 1 | 3 |
| 38 | Records of expert lectures conducted (Dates, resource person, topic, student attendance) | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 4 | 2 | N.A. | N.A. | 3 |
| 39 | Training programmes attended by faculty (Format: S.No., Faculty name, title, place duration) | 4 | 4 | 0 | 2 | 4 | 1 | 4 | 4 | 0 | 1 | 1 | 1 |
| 40 | Training programmes attended by staff (Format: S.No., name of staff, title, venue/place, duration) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | N.A. | 1 |
| 41 | Workshops/Seminars/Conferences attended, papers presented by faculty. (Format : S.No., Faculty name, title, place, duration) | 4 | 3 | 1 | 3 | 2 | 2 | 4 | 3 | 2 | 3 | 3 | 1 |



| | | | | | | | | | | | | | |
|---------------------|---|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 42 | Research projects (Submitted, Sanctioned, Ongoing, Completed & UC sent during evaluation period) (Format: Faculty, agency, file number, duration, amount, status) | 3 | 4 | 2 | 4 | 3 | 0 | 4 | 5 | 2 | 0 | 4 | 2 |
| 43 | Papers published (Journals/conferences) (Format: Authors, title, volume, page nos, year, Impact factor, whether SCI, UGC approved, Scopus or other indexing) | 2 | 4 | 0 | 3 | 2 | 2 | 3 | 5 | 3 | 3 | 1 | 1 |
| 44 | Faculty as resource persons (Format: Name, activity, place, duration, title (for expert lectures), venue, Role (such as committee member outside institution as an expert, reviewer, delivered expert/invited talk, organizing) | 2 | 4 | 0 | 3 | 3 | 0 | 4 | 5 | 0 | 1 | 3 | 2 |
| 45 | Patents (Published/awarded/filed/initiatives taken) | 0 | 5 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 46 | Books and Book Chapters published by Faculty | 0 | 4 | 0 | 5 | 1 | 0 | 3 | 4 | 3 | 5 | 0 | 0 |
| 47 | Best practices of the department (Any two, in format provided) | 1 | 3 | 3 | 2 | 1 | 4 | 3 | 4 | 2 | 2 | 2 | 3 |
| 48 | SWOT/SWOC analysis | 1 | 3 | 3 | 3 | 1 | 2 | 3 | 4 | 3 | 3 | 3 | 3 |
| 49 | Any other relevant achievements | 3 | 3 | 0 | 4 | 1 | 2 | 4 | 4 | 4 | 4 | 0 | 3 |
| 50 | Overall comments/Remark (if any) | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 3 |
| Total Points | | 156 | 191 | 136 | 171 | 155 | 128 | 173 | 188 | 132 | 121 | 101 | 149 |

M. Pandit
02/03/2020
(Dr. Manjaree Pandit)
(Dean Academic)



R.K. Pandit
3.3.2020
(Dr. R.K. Pandit)

Director
DIRECTOR
Madhav Institute of Technology & Science
Gwalior - 474005 (M.P.)