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Minutes of the online Board of studies meeting on 28-11-2020

Following members have attended the online meeting;

	DI	8,
2	Dr. Laxmi Shrivastava	Chairperson, Associate Professor and I/C Head
2.	Prof. Jyoti Singhai	RGPV nominee by Academic Council,
3	D. 41.4	Professor, MANIT, Bhopal
5.	Dr Alok Jain	V.C. Nominee, RGPV
1	F. C	Professor, SATI, Vidisha
7.	Er. Gaurav Tripathi	Representative from industry/ corporate sector/
		allied area
		External member, Sr. Enterprise Architect, HCL
5		Technologies SEZ, Noida
5.	Er. Pankaj Agarwal	Alumni, External member, Assistant Engineer,
6	7	UP Power Corporation Limited
6.	Prof. P. K. Singhal	Professor
7.	Dr. V. V. Thakare	Associate Professor
8.	Dr. R. P. Narwaria	Assistant Professor
9.	Dr. Karuna Markam	Assistant Professor
10.	Prof. Madhav Singh	Assistant Professor
11.	Prof. D. K. Parsediya	Assistant Professor
12.	All NPIU Faculty	Assistant Professor

following external member could not attend the meeting:

1. Prof. N. S. Raghava, External Member, Professor, ECE Dept., DTU, Delhi

It the onset, the chairperson welcomed external members to the meeting of BOS and placed he agenda for the deliberation to the members. The following deliberations were made as per he items of circulated agenda:

Ita To propose the list of courses which the students can opt from SWAYAM/NPTEL/MOOC Platform, to be offered in online mode under Departmental Elective (DE) category, for credit transfer in the VIII Semester (Batch admitted in 2017-18): applicable during January-June 2021 academic session

S.No	Category Code	Course Code	Name of The course	Duration of the	tion Course ne Registration		Name of the
				Course	Start	End	Mentor
				in weeks	Date	Date	Faculty
	Electro	onics/Elect	tronics & Teleco	mmunicatio	on Engi	neering	-
1	DE	140851/	Modern Digital	12	09-	25-	Awadhesh
1.		200851	Communication		11-	01-	Gupta
			techniques		2020	2021	-
2	DE	140852/	Mathematical	12	09-	25-	Dr Ashish
2.		200852	methods and		11-	01-	Gupta
			techniques in		2020	2021	•
			Signal				
			Processing				
	DE	140853/	Power	12	09-	25-	Dr Vikas
3.	22	200853	Management		11-	01-	Mahor
			Integrated		2020	2021	
			Circuits				

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 Item To propose the list of courses which the students can opt from SWAYAM/NPTEL/MOOC
Platform to be offered (for students of other departments) in *online mode under Open Category(OC)* for credit transfer in the *VIII Semester (Batch admitted in 2017-18): applicable during January-June 2021 academic session*

S.No	0 Category Course Nam Code Code		Name of The course	Duration of the	Cou Regist	irse ration	Name of the
				Course	Start	End	Mentor
				in weeks	Date	Date	Faculty
	F	Electronics	s/Electronics & Telecom	munication	Enginee	ring	
1.	Open		An introduction to	12	09-11-	25-01-	Dr Karuna
	Category		Information Theory		2020	2021	Markam
2.	(OC-4)		Sensors and Actuators	12	09-11-	25-01-	Deepak
					2020	2021	Batham
3.	Open		Electronics equipment	08	09-11-	25-01-	Arpita
	Category		integration and Prototype		2020	2021	Singhal
	(OC-5)		building				
4.			Computer Vision and	12	09-11-	25-01-	Shambhu
			Image Processing -		2020	2021	Kumar
			Fundamentals and				
			Applications				

Item | To propose the list of "Additional Courses" which can be opted for getting an

(i) Honours (for students of the host department)

fromen to by

3:

(ii) Minor Specialization (for students of other departments)

[These will be offered through SWAYAM/NPTEL/MOOC based Platforms for the VI semester (for the batch admitted in 2018-19) and for VIII semester students (for the batch admitted in 2017-18)] applicable during January-June 2021 academic session

Category	Semester	Semester Name of The Duration Course Regis		stration	Name of	
		course	of the Course in weeks	Start Date	End Date	the Mentor Faculty
Ele	ectronics/Ele	ctronics & Telec	ommunicatio	n Engineering	(VI Seme	ester)
Honours	VI	Electromagnetic Waves in Guided and Wireless Media	08	09-11-2020	15-02- 2021	Pooja Sahoo
	VI	Integrated Circuits, MOSFETs, Op- Amps and their Application	12	09-11-2020	25-01- 2021	Rishabh Shukla
	VI	High Power mültilevel converter	12	09-11-2020	25-01- 2021	Praveen K Singh
Minors	VI	Integrated Circuits, MOSFETs, Op- Amps and their Application	12	09-11-2020	25-01- 2021	Rishabh Shukla
	VI	High Power multilevel converter	12	09-11-2020	25-01- 2021	Praveen K Singh

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Elect	ronics/Ele	etronics & Telecor	nmunicatio	n Engineering (VIII Sem	ester)
Honours	VIII	Architectural Design of Digital Integrated Circuits	12	09-11-2020	25-01- 2021	Madhav Singh
	VIII	Cloud Computing and Distributed Systems	08	09-11-2020	25-01- 2021	Arpita Singhal
	VIII	Biomedical Signal Processing	12	09-11-2020	25-01- 2021	Awadhesi Gupta
Minors	VIII	Microwave Integrated Circuits	08	09-11-2020	25-01- 2021	Santosh Sharma
	VIII	Digital Signal Processing and its Applications	12	09-11-2020	25-01- 2021	Dr K Dube
	VIII	Computer Vision and Image Processing - Fundamentals and	12	09-11-2020	25-01-2021	Kumar

To review and finalize the list and syllabi for all Departmental Elective (DE) Courses of VI Item Semester to be offered to (the batch admitted in 2018-19) under the flexible curriculum along with

4: their COs ; { applicable during January-June 2021 academic session}

S No	Category	Course Code	Course Name
1	Departmental	140611/200611	Optical Communication
1.	Electives	140612/200612	Antenna and Wave Propagation
2.	Electives	140612/200613	Telecom Switching and Networks
3.	(DE-I)	140013/200013	Telecom o menning and Hermonie

For Syllabus, refer Annexure I

To review and finalize the list of Courses from SWAYAM/NPTEL/MOOC Platform to be offered Item (for batch admitted in 2018-19) in online mode under Departmental Elective (DE) Courses for 5:

dit transfer in the VI Semester {applicable during January-June 2021 academic session}

S.No	Category	Course Code	Name of The course	Duration of the	Course Registration		Name of the
	Cour	. 1		Course in weeks	Start Date	End Date	Mentor Faculty
	Elec	tronics/El	ectronics & Telecomn	unication]	Engineer	ing	
i.	Departmental Elective	140651/ 200651	Spread Spectrum Communications and Jamming	12	09-11- 2020	25-01- 2021	Deep Kishore Parsedia
2.	(DE-2)	140652/ 200652	Digital IC Design	12	09-11- 2020	25-01- 2021	Dr Vikas Mahor
3.		140653/ 200653	Fuzzy Sets, Logic and Systems & Application	12	09-11- 2020	25-01- 2021	Dr Vandana Vikas
							Thakare

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ltem	To revie	ew and finalize t	he Courses	& Syllat	oi to be offe	ered (for batch admitted in 2018-19) unde		
6:	the Ope COs.	en Category (OC	C) Courses for	or VI se	I semester students of other departments along with their			
	S.No	Category	Course	Tode	Course	Name		
	1.	Open Course	9001	104	Intelligen	t Control		
	2.	(OC-1)	900	105	Embedded	I Systems		
	For Sul	lahua n C n I						
	r or syl	ladus, refer <u>Anne</u>	exure II					
ltem 7:	To revi Departi	ew and finalize t mental Core (DC	he <i>Courses c</i>) Courses fc	& Syllab or the IV	i to be offer & <i>VI semest</i>	red (to the batch admitted in 2018-19)unde er students along with their COs.		
	S.No	Category	Semester	Cours	e Code	Course Name		
	1.	Departmental	IV	14040	1/200401	Electronics-II		
	2.	Core	IV	14040	2/200402	Analog Communication		
	3.		IV	14040	3/200403	Communication Networks		
	4.		IV	14	40404	Electronics Measurement and Instrumentation		
				2	00404	Stochastic Processes in		
						Communication		
	5.	-	VI	1	40601	Microprocessor & Interfacing		
	0.	-		14060)2/200601	Digital Signal Processing		
	Lon Su	llohua rafar Arr		2	00602	Data Communication		
Item 12:	Schem Syllabo To id propos	e: <u>Annexure IV</u> us: <u>Annexure V</u> dentify <i>gaps</i> e corrective mea	<i>in CO d</i> sures for imp	<i>attainme</i> proveme	<i>nt levels</i> nt	for <i>Jan-June 2020 semester</i> an		
	Direct Gaps i	CO attainment: <u>.</u> n CO attainment	Annexure VI : <u>Annexure V</u>	[/11				
Item 13:	To pre 2018-2 List of	pare and propos 2019, 2019-2020 Equivalence: <u>An</u>	se the equiv & the 2020 nnexure VIII	alence l admitted	ist of cours batch)	ses for B. Tech programmes (for 2017-1		
Item 14:	Any of	her matter: <u>Anne</u>	exure IX					
J)		foonan	A	bl Out	DEAN	ACADEMICST PR		

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Scheme of Examination (B.Tech. Electronics Engineering)

VI Semester [For batches admitted in Academic Session 2018-19 onwards]

S.	S. Subject Category		Subject Name		Ma	aximum Mar	ks Allotte	d	Total	Contact Hours per week			Total Credits
THU	Coue				Theory Slo	ot	Practical Slot		Marks				
1				End Sem.	Mid Sem Exam.	Quiz/ Assignm	End Sem.	Lab work & Sessional		L	Т	Р	Creaks
1.	140601	DC	Microprocessors & Interfacing (DC-13)	70	20	10	30	20	150	2	1	2	4
2.	140602	DC	Digital Signal Processing (DC-14)	70	20	10		-	100	3	1	-	4
3.	1406XX 1406XX	DE	DE-1*	70	20	10	-	-	100	4	-	-	4
5.	1.00/1/1	OC OC	OC-1*	70	20	10	-	-	100	4	-	-	4
6.	100007	MC	Disaster	70	20	10	-	-	100	2	1	-	3
7.	140606	DLC	Management (MC)						100	,	-	-	3
			(DLC-5)	-	-	-	50	50	100	-	-	4	2
	1		Total	420	120	60	80	70	750	18	7		
Add Hon	litional Cou lours or min	rses for obtaining for Specialization	Parmitt	Summer Ir	iternship-II	l (On Job Tr	raining) fo	r Four weeks dura	tion: Evaluati	on in VII S	emester	6	24
by d	lesirous stu	dents	i er inter	eu to opt i	or <u>maximi</u>	im two add	itional co	urses for the awar	rd of Honour	s or Mine	r specializ	ation	

* At least one of these courses must be run through SWAYAM/NPTEL/ MOOC

	Department Electives-1 (DE-1) 1406XX Department Electives-2 (DE-2) (MOOC) 1406XX	Optical Com 1406 Spread Spectrum C and Jammir	nunication 11 Communications ng 140651	Antennas Propagatie Digital IC De	and Wave on 140612 esign 140652	Telecom Switching and Networks 140613 Fuzzy Sets, Logic and Systems &	
Honors	Open Course-1 (C Advanced Power Electronics & Control	OC-1) Intellig	ent Control (90010	4)	Embedded Syst	ems (900105)	
Minors	Integrated Circuits, MOSFETs, Op-Amps	and their Application	High Power m	ss and their App altilevel converte	olication Hi; er	h Power multilever converter DEAN (ACADEMICS) M.I.T.S GWALLOR	10 of

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Scheme of Examination B.Tech. VI Semester (E T)IT-1 1 1 1 1

			I for baich	es aamin	ieu in A	cauemic	Session	2010-19 UNW	uras/				
S.	Subject	Category	Subject Name		Ma	ximum Mar	ks Allottee	1	Total Contact Ho		ct Hours pe	r week	Total
No	Code				Theory Slo	t	Pr	actical Slot	Marks				Credits
				End	Mid	Quiz/	End	Lab work &		L	Т	P	1
				Sem.	Sem	Assignm	Sem.	Sessional					
					Exam.	ent							
1.	200601	DC	Digital Signal	70	20	10	30	20	150	2	1	2	4
			Processing (DC-13)										
2.	200602	DC	Data Communication	70	20	10	-	-	100	4	-	-	4
			(DC-14)										1
3.	2006XX	DE	DE-1*	70	20	10	-	-	100	4	-	-	4
4.	2006XX	DE	DE-2*	70	20	10	-	-	100	4	-	-	4
5.	2006X5	OC	OC-1*	70	20	10	-	-	100	2	1	-	3
6.	100007	MC	Disaster	70	20	10	-	-	100	3	-	-	3
			Management (MC)										
7.	200606	DLC	Minor Project-II	-	-	-	50	50	100	-	-	4	2
			(DLC-5)										í í
			Total	420	120	60	80	70	750	19	2	6	24
				Summer I	nternship-II	I (On Job T	raining) fo	r Four weeks dura	tion: Evaluat	ion in VII :	Semester		
Ad	ditional Co	urses for obtaining											
Ho	nours or mi	nor Specialization	Permitt	ed to ont	for maxim	um two add	litional co	urses for the awa	rd of Honou	rs or Min	or specializ	ation	
by	desirous stu	idents			<u></u>			under int the ave	i di ci filonou	13 01 10111	or specializ		

* At least one of these courses must be run through SWAYAM/NPTEL/ MOOC

	Department Electives-1 (DE-1) 2006XX	Optical Communication 200611	Antennas and Wave Propagation 200612	Telecom Switching and Networks 200613
	Department Electives-2 (DE-2)	Spread Spectrum Communications	Digital IC Design 200652	Fuzzy Sets, Logic and Systems &
Į	(MOOC) 2000AA	and Jamming 200051		Application 200653

Open Course-1 (OC-1) Intelligent Control (900104) Embedded Systems (900105)

Integrated Circuits, MOSFETs, Op-Amps and their Application Honors Advanced Power Electronics & Control High Power multilevel converter Minors Integrated Circuits, MOSFETs, Op-Amps and their Application **High Power multilevel converter** DEAN (ACADEMICS) 10 of 11 lisual MITS

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Scheme of Examination

B.Tech. VIII Semester (Electronics Engineering)

C N	C • • •	~		1			rori	outches aumittee	i m Acuue	unic -	16221	011 20	01/-10
S.No.	Subject	Category	Subject Name &			Maximum M	arks Allotted		Total	(Conta	act	Total
	Code		Title	Theory Slot			Practical Slot		Marks		ours	per	Credits
				End	Mid	Quiz/	End Sem.	Term Work	1		weel	k	
				Sem.	Sem.	Assignment		Lab Work &	1	L	T	P	
					Exam			Sessional					
1.	1408XX	DE	DE-5*	70	20	10	-	-	100	2	-	-	2
2.		OC	OC-4*	70	20	10	-	-	100	2	-	-	2
3.		OC	OC-5*	70	20	10	-	-	100	2	-	-	2
4.	140804	DLC	Internship/ Project (DLC-9)	-	-	-	250	150	400	-	-	6	3
5.	140805	-	Innovative Technical Contribution [#]	-	_ 1	-	-	50	50	-	-	2	1
			Total	210	60	30	250	200	750	6	-	8	10
Additi Honou Specia	Additional Course for Honours or minor Permitted to Specialization				naximum t	wo additional o	courses for th	e award of Honou	irs or Mine	or sp	ecial	izatio	n

*All of these courses will run throughSWAYAM/NPTEL/ MOOC

"Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical events during the complete tenure of the UG program

Department Electives-1 (DE-5)	Modern digital communication techniques (140851)	Mathematical methods and techniques in	Power Management Integrated			
(1408XX)		Signal Processing (140852)	Circuits (140853)			
Open Course-4 (OC-4)	near dynamical systems	Sensors and A	ctuators			

ł	open course r(oc i)	Elitear Gynamical Systems	Sensors and Actuators
	Open Course-5 (OC-5)	Electronics equipment integration and Prototype building	Computer Vision and Image Processing - Fundamentals and Applications

	Honors	Architectural Design of Digital Integrated Circuits	Cloud Computing and Distributed Systems	Biomedical Signal Processing		
	Minors	Microwave Integrated Circuits	Digital Signal Processing and its Applications	Computer Vision and Image Processing	- THE	
				Fundamentals and Applications	JUNC	
	P				DEAN (ACA	DEMICS)
m	g nog -	- Sui Di		Ga	M.I.T.S	10 of 11
	7	Non all all all	() Contraction		GWALIOR	10 01 11
		these to a	4 116	•		



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Scheme of Examination

B.Tech. VIII Semester (Electronics and Telecommunication Engineering)

									Statistics of the local division of the loca				
subject	Category	egory Subject Name & Maximum Marks Allotted						Total	Contact			Total	
Code		Title	Theory Slot Practical Slot			tical Slot	Marks	Hours per			Credits		
			End	Mid	Quiz/	End Sem.	Term Work		week				
			Sem.	Sem.	Assignment		Lab Work &		L	T	P		
				Exam			Sessional						
2008XX	DE	DE-5*	70	20	10	-	-	100	2	-	-	2	
	OC	OC-4*	70	20	10	-	-	100	2	-	-	2	
	OC	OC-5*	70	20	10	-	-	100	2	-	-	2	
200804	DLC	Internship/ Project	-	-	-	250	150	400	_				
		(DLC-9)							-	-	6	3	
200805	-	Innovative	-	-	-	-	50	50					
		Technical							-	-	2	1	
		Contribution [#]									-		
		Total	210	60	30	250	200	750	6	-	8	10	
Additional Course for					71			100	U	_	0	10	
Honours or minor Permitted to			opt for i	naximum	two additional	courses for t	he award of Hono	ure or Min					
Specialization			-						or sp	ecial) D	
	008XX 200804 200805 nal Cours s or mino zation	Code Category 008XX DE OC OC 200804 DLC 200805 - nal Course for s or minor zation -	Ubject Code Category Subject Name & Title 008XX DE DE-5* OC OC-4* OC OC-5* 200804 DLC Internship/ Project (DLC-9) 200805 - Innovative Technical Contribution# Total nal Course for s or minor	Code Category Subject Name & Title 008XX DE DE-5* 00C OC-4* 70 0C OC-5* 70 00804 DLC Internship/Project (DLC-9) - 200805 - Innovative Technical Contribution# - 1 Total 210 1 Permitted to opt for 1 200 Total 210	ubject CodeCategory CodeSubject Name & TitleTheory End Sem. Exam008XXDEDE-5*7020008XXDEDE-5*70200COC-4*70200COC-5*7020200804DLCInternship/ Project (DLC-9)-200805-Innovative Contribution#-1Total21060aal Course for s or minor zation-Permitted to opt for maximum	ubject CodeCategory CodeSubject Name & TitleMaximum Ma Theory Slot008XXDEDE-5*Find Sem.Mid Sem. ExamQuiz/ Assignment Exam008XXDEDE-5*7020100COC-4*7020100COC-5*70201000804DLCInternship/ Project (DLC-9)200805-Innovative Contribution#1Total21060301Course for s or minor zationPermitted to opt for maximum two additional	ubject CodeCategory and the set of the set	Maximum Marks Allotted Code Subject Name & Title Theory Slot Practical Slot End Mid Sem. Quiz/ Sem. End Sem. Term Work 008XX DE DE-5* 70 20 10 - 002 OC OC-4* 70 20 10 - 00 OC OC-5* 70 20 10 - 000004 DLC Internship/Project (DLC-9) - - 250 150 200805 - Innovative Contribution# - - - 50 atl Course for s or minor For minor 210 60 30 250 200	ubject CodeCategorySubject Name & TitleMaximum Marks AllottedTotal Practical SlotTotal Marks008XXDEDE-5*70201010000COC-4*70201010000804DLCInternship/ Project (DLC-9)250150400200805-Internship/ Project Contribution#505010050501015050102105050200805-Internship/ Project Contribution#50501015050102105050200805-Innovative Contribution#505010150505010210505010321060302502007501041005010510505010630250200750505050107108108108108108108108108108108108108108108 <td>ubject Code Category Subject Name & Title Theory Slot Practical Slot Marks Ho 008XX DE DE-5* 70 20 10 - - 100 2 008XX DE DE-5* 70 20 10 - - 100 2 008XX DE DE-5* 70 20 10 - - 100 2 008XX DE DE-5* 70 20 10 - - 100 2 000 OC OC-4* 70 20 10 - - 100 2 200804 DLC Internship/ Project (DLC-9) - - - 50 50 - 200805 - Innovative Contribution[#] - - - - 50 50 -</td> <td>ubject CodeCategory Subject Name & TitleSubject Name & TitleMaximum Marks AllottedTotalConta Hours$CodeTitleTheory SlotPractical SlotMarksMarksHoursweekEndSem.CodeSem.ExamSem.ExamAssignmentEnd Sem.SessionalTotalMarksHoursweek008XX008XXDEDE-5*7020101002-000COC-4*7020101002-000004DLCInternship/Project(DLC-9)250150400200805-InnovativeContribution#5050all Course fors or minorzationTotal21060302502007506-$</br></br></td> <td>ubject CodeCategory TitleSubject Name & TitleMaximum Marks AllottedTotalContact Hours per weekCodeTitleTheory SlotPractical SlotMarksMarksHours per weekMarksMarksLab Work & Lab Work & SessionalLab Work & Lab Work & SessionalLab Work & Lab Work & SessionalLab Work & Lab Work & Lab Work & Lab Work & Lab Work & Lab Work & SessionalLab Work & Lab Work & L</td>	ubject Code Category Subject Name & Title Theory Slot Practical Slot Marks Ho 008XX DE DE-5* 70 20 10 - - 100 2 008XX DE DE-5* 70 20 10 - - 100 2 008XX DE DE-5* 70 20 10 - - 100 2 008XX DE DE-5* 70 20 10 - - 100 2 000 OC OC-4* 70 20 10 - - 100 2 200804 DLC Internship/ Project (DLC-9) - - - 50 50 - 200805 - Innovative Contribution [#] - - - - 50 50 -	ubject CodeCategory Subject Name & 	ubject CodeCategory TitleSubject Name & TitleMaximum Marks AllottedTotalContact Hours per weekCodeTitleTheory SlotPractical SlotMarksMarksHours per weekMarksMarksLab Work & Lab Work & SessionalLab Work & Lab Work & SessionalLab Work & Lab Work & SessionalLab Work & Lab Work & Lab Work & Lab Work & Lab Work & Lab Work & SessionalLab Work & Lab Work & L	

*All of these courses will run throughSWAYAM/NPTEL/ MOOC

*Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical events during the complete tenure of the UG program

Department Electives-1 (DE-5)	Modern digital communication techniques (200851)	Mathematical methods and techniques in	Power Management Integrated
(2008XX)		Signal Processing (200852)	Circuits (200853)
		0(

Open Course-4 (OC-4)	Linear dynamical systems	Same 14 4
Open Course-5 (OC-5)	Electronics equipment integration and	Computer Vision and Image Processing - Fundamentals
	Prototype building	and Applications

Honors	Architectural Design of Digital Integrated Circuits	Cloud Computing and Distribute 1.0		
Minors	Microwave Integrated Circuits	Distributed Systems	Biomedical Signal Processing	
	interestate integrated circuits	Digital Signal Processing and its Applications	Computer Vision and Image Processing -	()
			Fundamentals and Applications	

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Scheme of Examination

GROUP Y: I Semester

B. Tech. I Semester (Electronics, Computer Science & Engineering, Information Technology, Electronics & Telecommunication, Chemical)

							Fo	r batches admit	tted in acade	mic sess	ion 2020	-21 01	waras
					Max	imum Marks A	llotted			Con	tact Hou	rs per	
S	Subject	Category			Theory	Slot	Pra	actical Slot	Total		Week		Total
No.	Code	Code	Subject Name	End Sem.	Mid Sem.	Quiz/ Assignment	End Sem.	Lab work / Sessional	Marks	L	Т	Р	Credits
1.	100013	BSC	Engineering Physics	60	20	20	60	40	200	2	1	2	4
2.	100020	ESC	Basic Civil Engineering & Mechanics	60	20	20	-	-	100	ô 2	ĩ	-	3
4	100021	ESC	Basic Mechanical Engineering	60	20	20	-	-	100	z 2	1	-	3
3	100022	ESC	Basic Electrical & Electronics Engineering	60	20	20	60	40	200	2	1	2	4
5	100023	ESC	Basic Computer Engineering	60	20	20	60	40	200	2	1	2	4
6	. 140111	ESC	Electronics Workshop	-	-	-	60	40	100	10	5	2	1
			Total	300	100	100	240	160	900	12	3	8	19
I	nduction pr	ogramme of	three weeks (MC): Physic	al activity, Ci	reative Arts	s, Universal Huma ion to Department	n Values, l /Branch &	Literary, Proficien & Innovations.	cy Modules, L	ectures by	Eminent	People, V	isits to
-		NSS /	NCC	Juli Artas, 14				Qualifier					
		1,557	CROI	P X · (Civil	Mechanic	al. Electrical. Ch	emical. a	nd Automobile)					

GROUP Y: (Electronics, Computer Science & Engineering, Information Tech. Electronics & Telecommunication); 01Theory Period=1 Credit; 02 Practical Periods =1

Credit 15/12/2020 The AR DEAN (ACADEMICS) xah. M.LT.S GWALIOR

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Scheme of Examination **GROUP Y: II Semester**

B. Tech. II Semester (Electronics, Computer Science& Engineering, Information Technology, Electronics & Telecommunication, Chemical)

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S. Subject Category C. L. M. Theory Slot Practical Slot Total Contac											rs per	
Subject	Category	Subject Name		Theory	/ Slot	Prac	ctical Slot	Total		Week		Total
Code	Code	Subject Name	End Sem.	Mid Sem.	Quiz/ Assignment	End Sem.	Lab work / Sessional	Marks	L	Т	Р	Credits
100011	BSC	Engineering Mathematics –I	60	20	20	-	-	100	3	1	-	4
140211	DC	Electronics Devices	60	20	20	60	40	200	2	1	2	4
140212	DC	Engineering Materials	60	20	20			100	3	1	-	4
100015	HSMC	Energy, Environment, Ecology & Society	60	20	20	-	-	100	3	-	-	3
100016	HSMC	Technical Language	60	20	20	-	-	100	3	-	-	3
100017	HSMC	Language Lab	-	× _	-	60	40	100	-	-	2	1
		Total	300	100	100	120	80	700	14	3	4	19
ner Interns	hip Project –	l (Institute Level) (Qualif	ier): Mir	nimum tv	vo-week duration	n: Evaluat	tion in III Seme	ster.				
	NSS / N	сс					Qualifi	er				
		GROU	л лр X: (С	ivil, Mec	hanical, Electric	al, and Au	utomobile)					
GR	OUP Y: (Elec	ctronics, Computer Science	e& Engi	ineering,	Information Te	chnology,	Electronics &	Felecommu	nication	, Chemic	al)	
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	Subject Code 100011 140211 140212 100015 100016 100017 Iner Interns GR	Subject CodeCategory Code100011BSC140211DC140212DC140212DC100015HSMC100016HSMC100017HSMC100017HSMCner Internship Project -NSS / NGROUP Y: (ElectSTU2000(ACADEMICS)IOR	Subject Code Category Code Subject Name 100011 BSC Engineering Mathematics –I 140211 DC Electronics Devices 140212 DC Engineering Materials 100015 HSMC Energy, Environment, Ecology & Society 100016 HSMC Technical Language 100017 HSMC Language Lab 100017 HSMC Total ner Internship Project – I (Institute Level) (Qualif NSS / NCC GROUP Y: (Electronics, Computer Science 01 The 01 The MACADEMICS Wather Science 01 The	Subject Code Category Code Subject Name End Sem. 100011 BSC Engineering Mathematics -1 60 140211 DC Electronics Devices 60 140212 DC Engineering Materials 60 100015 HSMC Energy, Environment, Ecology & Society 60 100016 HSMC Technical Language 60 100017 HSMC Language Lab - Total 300 300 ner Internship Project - I (Institute Level) (Qualifier): Min NSS / NCC GROUP Y: (Electronics, Computer Science& Eng 01Theory Peri MCADEMICS Materials MOR Mathematics - I Institute Level) (Qualifier): Min	Subject CodeCategory CodeSubject NameMain End Sem.100011BSCEngineering Mathematics -16020140211DCElectronics Devices6020140212DCEngineering Materials6020140212DCEnergy, Environment, Ecology & Society6020100015HSMCEnergy, Environment, Ecology & Society6020100016HSMCTechnical Language6020100017HSMCLanguage LabTotal300100100ner Internship Project - I (Institute Level) (Qualifier): Minimum twoNCCGROUP X: (Civil, Mect GROUP Y: (Electronics, Computer Science& Engineering, 01 Theory Period=1 CrACADEMICSIORImage Lab-C	Maximum Marks Theory SlotSubject CodeSubject NameMaximum Marks Sem.100011BSCEngineering Mathematics -1602020140211DCElectronics Devices602020140212DCEngineering Materials602020140212DCEngineering Materials602020100015HSMCEnergy, Environment, Ecology & Society602020100016HSMCTechnical Language602020100017HSMCLanguage LabTotal300100100ner Internship Project - I (Institute Level) (Qualifier): Minimum two-week durationNSS / NCCGROUP X: (Civil, Mechanical, Electric GROUP Y: (Electronics, Computer Science& Engineering, Information Te 01Theory Period=1 Credit; 02 PracticalMAXMAXMAXMAXMAX	Subject Code Category Code Subject Name Maximum Marks Allotted Theory Slot Prace 100011 BSC Engineering Mathematics – 1 60 20 20 - 140211 DC Electronics Devices 60 20 20 - 140212 DC Engineering Materials 60 20 20 - 100015 HSMC Energy, Environment, Ecology & Society 60 20 20 - 100016 HSMC Technical Language 60 20 20 - 100017 HSMC Language Lab - - - 60 100017 HSMC Language Lab - - - 60 ner Internship Project – I (Institute Level) (Qualifier): Minimum two-week duration: Evalua NSS / NCC GROUP X: (Civil, Mechanical, Electrical, and Av GROUP Y: (Electronics, Computer Science& Engineering, Information Technology, 01Theory Period=1 Credit; 02 Practical Periods MACADEMICS W W W W	Subject Code Category Code Subject Name Maximum Marks Allotted 100011 BSC Engineering Mathematics -1 60 20 20 - - 140211 DC Electronics Devices 60 20 20 - - 140212 DC Engineering Materials 60 20 20 60 40 140212 DC Engineering Materials 60 20 20 - - 100015 HSMC Energy, Environment, Ecology & Society 60 20 20 - - 100016 HSMC Technical Language 60 20 20 - - 100017 HSMC Language Lab - - - 60 40 ner Internship Project - I (Institute Level) (Qualifier): Minimum two-week duration: Evaluation in III Seme Semineering, Information Technology, Electronics & '01Theory Period=1 Credit; 02 Practical Periods =1 Credit SGROUP Y: (Electronics, Computer Science& Engineering, Information Technology, Electronics & '01Theory Period=1 Credit; 02 Practical Periods =1 Credit	Subject Code Category Code Subject Name Maximum Marks Allotted Theory Slot Practical Slot Total Marks 100011 BSC Engineering Mathematics –1 60 20 20 - - 140211 DC Electronics Devices 60 20 20 - - 100 140212 DC Engineering Materials 60 20 20 60 40 200 140212 DC Engineering Materials 60 20 20 - - 100 100015 HSMC Energy, Environment, Ecology & Society 60 20 20 - - 100 100016 HSMC Technical Language 60 20 20 - - 100 100017 HSMC Language Lab - - - 60 40 100 100017 HSMC Language Lab - - - 60 40 100 100017 HSMC Canguage Lab - - - 60 40 100	Subject Category Code Subject Name Maximum Marks Allotted Control Contecontecto Control Control Control Control Contro Cont	Subject NameMaximum Marks AllottedContact HouSubjectSubject NameMarksMidQuiz/Practical SlotTotalMarks100011BSCEngineering Mathematics -160202010031140211DCElectronics Devices60202010031140212DCEngineering Materials60202010031100015HSMCEnergy, Environment, Ecology & Society6020201003-100016HSMCTechnical Language6020201003-100016HSMCTechnical Language6020201003-100017HSMCLanguage Lab6040100100017HSMCLanguage Lab6040100100017HSMCCanguage Lab6040100100017HSMCCanguage Lab6040100100017HSMCCanguage Lab6040100100017HSMCCanguage LabCol40100 </td <td>Maximum Marks AllottedContact Hours per WeekSubjectSubject NameMaximum Marks AllottedTotalContact Hours per Week100011BSCEngineering Mathematics -160202010031-140211DCElectronics Devices60202010031-140212DCEngineering Materials6020202010031-100015HSMCEnergy, Environment, Ecology & Society60202010031-100016HSMCTechnical Language6020201003100017HSMCLanguage Lab60401002100017HSMCLanguage Lab60401002100017HSMCLanguage Lab6040100-22100017HSMCCanguage Lab6040100-22100017HSMCCanguage Lab6040100-22100017HSMCCanguage Lab6040100-22100017HSMCCanguage Lab<t< td=""></t<></td>	Maximum Marks AllottedContact Hours per WeekSubjectSubject NameMaximum Marks AllottedTotalContact Hours per Week100011BSCEngineering Mathematics -160202010031-140211DCElectronics Devices60202010031-140212DCEngineering Materials6020202010031-100015HSMCEnergy, Environment, Ecology & Society60202010031-100016HSMCTechnical Language6020201003100017HSMCLanguage Lab60401002100017HSMCLanguage Lab60401002100017HSMCLanguage Lab6040100-22100017HSMCCanguage Lab6040100-22100017HSMCCanguage Lab6040100-22100017HSMCCanguage Lab6040100-22100017HSMCCanguage Lab <t< td=""></t<>

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B.Tech. II Semester (Electronics Engineering/ Electronics and Telecommunication Engineering)

Subject Code	Category Code	Subject Name	Theory Slot			Prac	Total Mark	Contact Hr/week		ct ek	Total Credit	
			End Sem Marks	Mid Sem Marks	Quiz/ Assignment Marks	End Sem Mark	Lab work & Sessional Mark	S	L	1	r	3
140211/2 00211	DC	Electronics	60	20	20	60	40	200	2	1	2	4

Electronics Devices (140211/200211)

Course Objective: To understand construction, principal and operation of different semiconductor devices.

Unit I: Fundamental of Electronic Devices: Elemental & Compound Semiconductor Materials, Bonding Forces and Energy Bands in Intrinsic and Extrinsic Silicon, Charge Carrier in Semiconductors, Carrier Concentration, Extrinsic Semiconductor, Hall Effect, Mechanism of Current Flow, Drift Current, Diffusion Current, Einstein Relation, Continuity Equation.

Unit II: Semiconductors Diodes: P-N Junction properties, Diode Characteristics, Equilibrium condition, biased junction, Steady state condition, P-N Junction breakdown mechanism, Capacitance of junction barrier, Diode circuit parameters, Basic circuits of Rectifier, Clippers and Clampers.

Unit III: Bipolar Junction Transistors: Construction, basic operation, current components and equations, CB, CE and CC configuration, input and output characteristics, Early effect, Region of operations: active, cut-off and saturation region.

Unit IV: Field effect transistors: Construction and characteristics of JFET, working principle of JFET.MOSFET construction and characteristics, MOSFET enhancement and depletion mode.

Unit V: Power Electronics Devices: Basic principle and working of SCR, IGBT, Uni-junction Transistor (UJT) and Thyristors. UJT: Principle of operation, characteristics.

Text Books:

- 1. Electronics Devices and Circuits: Boylested & Nashelsky, 11th Edition, Pearson Education India
- 2. Electronic devices and circuits: S. Salivahanan, 2nd Edition, Tata McGraw-Hill Education, 2011.
- 3. Microelectronic Circuits: Theory and Application: Sedra & Smith, 7th Edition, Oxford University Press.

Reference Books:

1.Micro Electronics: Millman, & Grabel, 2nd Edition, McGraw Hill Education 2.Integrated Electronics: Millman & Halkias, McGraw Hill Education.

Course Outcomes

After the completion of this course students will be able to:

- CO1. Analyze the properties of semiconductor materials.
- CO2. Understand construction and working of different diodes.
- CO3. Analyze the operation of Bi-polar junction transistors.
- CO4. Examine the working of Field Effect Transistors.
- **CO5.** Analyze the working of power electronics devices.

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Subject Code	Category Code	Subject Name	Theory Slot			Prac	Total Mark	Contact Hr/week		ct ek	Total Credit	
			End Sem Marks	Mid Sem Marks	Quiz/ Assignment Marks	End Sem Mark	Lab work & Sessional Mark	s	L	Т	Р	s
00212	DC	Engineering materials	60	20	20	-	-	100	3	1	-	4

B.Tech. II Semester (Electronics Engineering/ Electronics and Telecommunication Engineering)

Engineering Materials (140212/200212)

Course Objective: To introduce the student with different materials and their characteristics used in manufacturing various electrical and electronics equipment.

Unit 1 Conducting materials: Classification of Engineering Materials, Crystal Structure of The Material, Crystal System, Unit Cells and Space Lattices and Defects. Conducting Material- Properties of Conductors, Characteristics of Good Conductor Material, Commonly used Conducting Materials, Conducting Materials for Overhead Lines, Types of Conductor and Applications.

Unit 2 Dielectric materials: Dielectric Strength, Factors affecting Dielectric Strength, Dielectric Loss, Dissipation Factor, Factors affecting Dielectric Loss, Permittivity & Polarization, Conduction through Dielectric. Application of Dielectric. Different Types of Capacitors and Materials used for them. Piezoelectricity & Ferro Electricity

Unit 3 Semi Conducting Material: Introduction - Semi-conductors and their properties, Different Semiconducting materials (Silicon and Germanium) used in manufacture of various Semiconductor devices (i.e p-type and n-type semiconductors), Materials used for electronic components like Resistors, Capacitors, Diodes, Transistors and Inductors etc.

Unit 4 Insulating Material: Plastics- Definition and classification, Thermosetting Materials, Thermoplastic Materials; Natural Insulating materials, properties and their applications; Gaseous Materials – Ceramics-properties and applications.

Unit 5 Magnetic Material: Introduction and classification - Ferromagnetic Materials, Permeability, BH curve, Magnetic Saturation, Hysteresis loop (including) coercive force and Residual Magnetism, Concept of Eddy Current and Hysteresis loss, Curie temperature, Magnetostriction effect, Soft Magnetic Materials, Hard Magnetic materials, Hall effect and its applications.

Text Books:

1. SK Bhattacharya, "Electrical and Electronic Engineering Materials"1st edition, Khanna Publishers. New Delhi, 2006.

2. A.J. Dekker "Electrical Engineering Materials", Reprint 1st edition, PHI, 2006.

Reference Books:

- 1. Sahdev, "Electrical Engineering Materials", Unique International Publications.
- 2. C. S. Indulkar & S. Thiruvengadam, "Electrical Engineering Materials", Reprint 1st edition, 2013, S. Chand & Com. Ltd, New Delhi -55
- 3. S.P. Seth, P.V. Gupta "A course in Electrical Engineering Materials", 4th Edition, 2017, Dhanpat Rai & Sons.

Course Outcome:

After successful completion of the course, student will be able to:

- Classify engineering materials. CO 1.
- Analyze the characteristics of dielectric materials. CO 2.
- Analyze the characteristics of semi-conducting materials. CO 3.
- Identify insulating materials for special purposes. CO 4.

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Storm - The attack Classify magnetic materials with reference to their properties. CO 5.

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B.Tech. I Semester (Electronics Engineering/ Electronics and Telecommunication Engineering)

Subject Code	Category Code	Subject Name	Theory Slot Practical Slot				Total Mark	C H	onta /we	ct ek	Total Credit	
	2		End Sem Marks	Mid Sem Marks	Quiz/ Assignment Marks	End Sem Mark	Lab work & Sessional Mark	5	L	Т	Р	5
140111/2 00111	ESC	Electronics Workshop	-	-		60	40	100	-	-	2	1

Subject Name: Electronic Workshop Subject Code: 140111/200111

Course Objectives:

Students will be able to learn the practical aspects of the basic electronic components, instruments and PCB designing.

List of Experiment

- 1. Study of basic electronic components
- 2. Study of bread board, power supply, digital storage oscilloscope and multimeter.
- 3. Identification of Polarity, and cut in voltage of various electronics components.
- 4. Phase shift measurement using Lissajous Pattern.
- 5. Study of basic steps involved in PCB designing.
- 6. Fabrication of small electronic circuits.

Course Outcome:

After completing the course, students will be able to

CO1. Evaluate the parameters of basic electronic components.

CO2. Calculate the phase shift between two waveforms.

CO3. Fabricate small electronics circuits.

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Department of Electronics Engineering

Status CO Target CO **CO** Statement CO Course Semester Attainment Attainment Achieved 72.6 70 Design the Tuned Amplifier with the given Parameters. CO1 Semester -14040/200401 Achieved 73.3 70 Differentiate between the Voltage and Power Amplifier. CO2 Electronics-II IV Achieved 70.8 70 Design the Multistage Amplifiers. CO3 Achieved Design the Various Electronics Circuits using Operational 70 83.6 CO4 Amplifier. Achieved Realize Active Filters According to Butterworth and 92.27 70 CO5 Chebyshev Polynomials. Not Achieved Apply the Concept of Multiplexing and Modulation in 68.75 70 140402/200402 CO1 Communication Engineering Analog Achieved Analyze the Amplitude Modulation and Angle Modulation 79.38 70 CO2 Communication with their Waveforms Explain the Generation and Detection for Various 76.75 70 Achieved CO3 Modulation Techniques. Achieved Explain the Working of Transmitter and Receiver. 87.38 70 CO4 Evaluate the Statistical Parameters for General PDF/CDF. 67.75 Not Achieved 70 CO5 Evaluate the Effects of Noise on Different Modulation 82.5 Achieved 70 CO6 Techniques. Compute the Various Parameters of Different Passive 0 NA CO1 140403/200403 Networks. Communication Design the Symmetrical and Asymmetrical Attenuators. 0 NA CO2 Network Achieved Synthesize the Network for A Given Positive and Minimum 96.88 70 CO3 Positive Real Function. Design Passive Filters for the Given Specifications Achieved 73.46 70 CO4 Analyze the Characteristics of Various Transmission Lines. Not Achieved 55.74 70 CO5 Not Achieved 54.98 70 Impedance and SWR Graphically CO6 Calculate the /Analytically. 87.13 Achieved **Discuss** Performance Characteristics of an Instrument 70 CO1 140404 Achieved Explain the Working Principle and Applications of Bridges 79.8 70 CO₂ Electronics and Transducers . Measurement

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Direct CO Attainment for the session January - June 2020

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	and Instrumentation	CO3	Analyze the Working Principle of Digital Instruments and	89.4	70	Achiev
	monuncitation	CO4	Measure Different Parameters using Various Circuits	80.675	70	Achieve
		CO5	Design of A/D and D/A Converter.	76.8	70	Achiev
Semester - VI	200602 Data Communication	CO1	Examine the Concept of Different Layers in Data Communication Networks	68.75	70	Not Achie
		CO2	Analyze the Error and Flow Control in Communication Network	79.38	70	Achieve
		CO3	Explain the Concepts of MAC Layer	76.75	70	Achieve
		CO4	Identify the Different Type of Routing Used in IP	87.38	70	Achieve
		CO5	Discuss the Transport Mechanism in TCP/UDP	67.75	70	Not Achie
	140601 Microprocessor	CO1	Explain the Architecture and Organization of 8085 Microprocessors.	70.5	70	Achieve
	and Interfacing	CO2	Develop Assembly Language Programming Skill for 8085.	68.25	70	Not Achie
		CO3	Design the Interfacing Circuitry of Memory and I/O Devices Using Interfacing Chips/Pics with 8085.	65.30	70	Not Achie
		CO4	Discuss the Architecture and Organization of 8086 Microprocessors.	78.3	70	Achieve
		CO5	Describe the Instruction Set and Architecture of 8051 Microcontroller.	84.7	70	Achieve
	140602 Digital	CO1	Analyze Discrete Time System using Transform Methods.	88.77	75	Achieve
	Signal	CO2	Compute DFT Using FFT Algorithms.	47.5	70	Not Achie
	Processing	CO3	Design IIR Filters.	73.25	70	Achieve
		CO4	Design FIR Filters.	96	80	Achieve
		CO5	Apply the Concept of Multi-Rate Signal Processing in Practical Applications.	92.75	80	Achieve
	140603 Optical	CO1	Explain the Basic Elements of Optical Fiber Transmission.	79.3	70	Achieve
	Communication	CO2	Discuss Fiber Fabrication, Splicing and Optical Connectors.	73	70	Achieve
	(DE-1)	CO3	Describe the Working of Optical Sources and Optical Detectors.	77.5	70	Achieve
		CO4	Calculate the Channel Impairments Like Losses and Dispersion.	73.5	70	Achiev
		CO5	Discuss Coherent Optical Transmission System and Optical Networks.	77.75	70	Achiev
	140613 Antenna	COI	Evaluate Various Parameters of the Antenna.	79	70	Achiev

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	and Wave	CO2	Analyze the Design Parameters and Radiation Mechanism of Wire Antennas	73	70	Achieved
	DE-1)	CO3	Design Antenna Array for the Given Radiation	72	70	Achieved
		CO4	Analyze the Design Parameters and Radiation Characteristics of Aperture and Special Antennas.	79	70	Achieved
		CO5	Describe Effects of Earth and its Atmosphere on Radio Wave Propagation.	86	70	Achieved
	140615 OC-1 (Intelligent Control) 140605 OC-2 (Embeded System)	COI	Explain the Fundamental Principle Behind Adaptive Control.	75.38	70	Achieved
		CO2	Estimate Various Parameter of Control System Using Artificial Neural Network	71.87	70	Achieved
		CO3	Apply the Concept of Artificial Neural Network to the Field of Control	73.25	70	Achieved
		CO4	Optimize the Throughput of the System using Optimization Methods Like Genetic Algorithm	78.50	70	Achieved
		CO5	Design Fuzzy Logic Based Control System	76.75	70	Achieved
		CO1	Explain the Architecture of Embedded System and 8051	77.11	70	Achieved
		CO2	Develop Assembly Language Programming Skill for 8051	75.62	70	Achieved
		CO3	Analyze the Concept of Timer/Counters, Serial Communication and Interrupt Handling Process of 8051 Microcontroller	76.12	70	Achieved
		CO4	Interface Memory and I/O Devices with 8051 Microcontroller	88	70	Achieved
		CO5	Interface Arduino with LED, Switches, LDR, PWM 16 X 2 LCD, Serial, L-293D For Motor Interfacing ADC.	89.5	70	Achieved
Semester - VIII	BELL/BETL 801 Fiber Optics &	CO1	Learn the Basic Elements of Optical Fiber Transmission Link, Fiber Modes Configurations and Fabrication Techniques.	99	70	Achieved
	Optical Communication	CO2	Classify Various Optical Sources, Fiber Splicing Techniques, Optical Connectors with their Principles	81.75	70	Achieved
		CO3	Analyze Different Optical Receivers and their Noise Performances	73.87	70	Achieved
		CO4	Calculate the Channel Impairments Like Losses and Dispersion	75.87	70	Achieved
		CO5	Discuss Coherent Optical Transmission System, the	76.62	70	Achieved
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		Installation and Performance Verification of Digital Optical			
	CO6	Discriminate Between Different Amplifiers and Learn	32	70	Not Achieved
BELL/BETL	CO1	Explain Basic Concepts and Terminologies of Satellite	85	70	Achieved
802	<u> </u>	Communication	72	70	Achieved
Communication	CO3	Analyze the Different Multiple Access Schemes for Satellite	80.6	70	Achieved
	CO4	Classify Different Propagation Effects in Satellite	75	70	Achieved
	CO5	Solve Problems Related to Channel Coding Techniques.	60	70	Not Achieved
	CO6	Distinguish Different Satellite System	63	70	Not Achieved
BELL/BETL	CO1	Explain the Various Components of the Composite Video Signal, TV Camera Tube, and Picture Tube.	74.4	70	Achieved
TV and RADAR	CO2	Characterize Various Types of Monochrome and Color TV Systems	85.8	70	Achieved
Engineering	CO3	Analyze Basic Factors Required for Successful Transmission and Reception of TV Signals	67	70	Not Achieved
	CO4	Explain the Advanced Topics in Digital TV and High Definition TV	95	70	Achieved
	CO5	Evaluate the Various Performance Factor Related to the RADAR.	72.4	70	Achieved
	CO6	Explain Target Detection and Tracking Using RADAR Systems.	75.3	70	Achieved
BELL/BETL	CO1	Explain the Basic Concepts of Neural Networks.	92.5	65	Achieved
804	CO2	Analyze the Concept of Human Neural Structure and ANN.	86	65	Achieved
Neural Networks and Fuzzy	CO3	Analyze the Various Feed Forward/Feedback Neural Networks.	65	65	Achieved
Systems	CO4	Examine Different Learning Methodologies	74	65	Achieved
	CO5	Explain the Concept of Fuzziness Involved in Various Systems and Fuzzy Set Theory.	62.5	65	Not Achieved

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Department of Electronics Engineering

List of subjects and their CO whose target levels are not achieved (Session January-June 2020):

Semester	Subject Code Subject Name		CO attainment (Target not
			Achieved)
IV	140402/200402	Analog Communication	CO1,CO5
	140403/200403	Communication Network	CO5,CO6
VI	200602	Data Communication	CO1,CO5
	140601	Microprocessor and Interfacing	CO2,CO3
	140602	Digital Signal Processing	CO2
VIII	BELL/BETL 801	Fiber Optics & Optical Communication	CO6
	BELL/BETL 802	Setellite Communication	CO5,CO6
	DELL/DETL 802		CO3
	BELL/BEIL 803	TV and RADAR Engineering	CO5
	BELL/BETL 804	Neural Networks and Fuzzy Systems	005

Action taken in respect to not achieved CO's are as follows:

- Additional Classes which will focused on specific CO
- More tutorials

And the Owner of Concession of

- Solutions of previous year question papers
- Additional classes by expert
- Take care of CO distribution during question paper setting
- Better attainment of these CO can be achieved by improving their weightage in question paper

Dr. Laxmi Shrivastava I/C HOD

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ANNEXURE TH

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Department of Electronics Engineering

Equivalence of Subjects

S. No.	Year	Subject Code & Title
1.	2017-18	NIL
2.	2018-19	NIL
3.	2019-20	NIL

Dr. Laxmi Shrivastava I/C HOD

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