



LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA'S

PRIYADARSHINI COLLEGE OF ENGINEERING

(Recognised by A.I.C.T.E. New Delhi & Govt. of Maharashtra Affiliated to R.T.M. Nagpur University)

Near C.R.P.F. Campus, Hingna Road, Nagpur - 440 019 (Maharashtra) India

Phone : 07104 - 299648, Fax : 07104-299681

E-mail : principal.pce.ngp@gmail.com • Website: www.pcenagpur.edu.in

AICTE ID No. 5435581; DTE CODE No. 4123; UNIVERSITY CODE No. 278

Accredited with Grade A+by NAAC



AN AUTONOMOUS INSTITUTE



CURRICULUM

UNDER GRADUATE PROGRAMME

B.TECH. ELECTRICAL ENGINEERING

WITH EFFECT FROM THE ACADEMIC YEAR 2024-2025.

LOKMANYA TILAK JANKALYAN SHIKSHAN SANSTHA

Lokmanya Tilak Bhavan, Laxmi Nagar, Nagpur - 440 022. Maharashtra, INDIA. Tel : +91-712-2230665, 2245121. Fax No. : + 91-712 2221430. Website : www.ltjss.net



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Semester wise Credit distribution structure for Four Year B.Tech Program

Semester		I	II	III	IV	V	VI	VII	VIII	Total Credits
Basic Science Course	BSC/ESC	08	08	--	--	--	--	--	--	16
Engineering Science Course		07	07	--	--	--	--	--	--	14
Programme Core Course (PCC)	Program Courses	02	--	10	08	12	11	10	--	53
Programme Elective Course (PEC)		--	--	--	--	04	03	06	06	19
Multidisciplinary Minor (MDM)	Multidisciplinary Courses	--	--	03	02	02	04	02	--	13
Open Elective (OE) Other than a particular program		--	--	03	02	02	--	--	--	07
Vocational and Skill Enhancement Course (VSEC)	Skill Courses	02	02	--	02	02	01	--	--	09
Ability Enhancement Course (AEC-01, AEC-02)	Humanities Social Science and Management (HSSM)	--	02	--	02	--	--	--	--	04
Entrepreneurship/Economics/Management Courses)		--	--	02	02	--	--	--	--	04
Indian Knowledge System (IKS)		02	--	--	--	--	--	--	--	02
Value Education Course (VEC)		--	--	02	02	--	--	--	--	04
Research Methodology	Experiential Learning Courses	--	--	--	--	--	03	--	--	03
Comm. Engg. Project (CEP)/Field Project (FP)		--	--	02	--	--	--	--	--	02
Project		--	--	--	--	--	--	04	--	04
Internship/OJT		--	--	--	--	--	--	--	12	12
Co-curricular(CC)	Liberal Learning Courses	02	02	--	--	--	--	--	--	04
Total Credits		23	21	22	20	22	22	22	18	170

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

FIRST SEMESTER

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	24UFY1C1T	BSC	ASH	Advanced Calculus &Statistics	3	1	0	4	40	60	--	--	100
2	24UFY1A2T	BSC	ASH	Engineering Chemistry	3	0	0	3	40	60	--	--	100
3	24UFY1A2P	BSC	ASH	Lab: Engineering Chemistry	0	0	2	1	--	--	25	25	50
4	24UFY1B3T	ESC	CSE	Computer Programming	2	0	0	2	20	30			50
5	24UFY1B3P	ESC	CSE	Lab: Computer Programming	0	0	2	1	--	--	25	25	50
6	24UFY1A4T	ESC	EE	Basics of Electrical & Electronics Engineering	3	0	0	3	40	60	--	--	100
7	24UFY1A4P	ESC	EE	Lab: Basics of Electrical & Electronics Engineering	0	0	2	1	--	--	25	25	50
8	24UFY122T	PCC	EE	Renewable Energy Sources	2	0	0	2	20	30	--	--	50
9	24UFY1A5T	IKS	ASH	Indian Traditional Knowledge	2	0	0	2	20	30	--	--	50
10	24UFY1A6P	SEC1	ASH	Skill Enhancement in Instrumental Techniques	0	1	2	2	--	--	25	25	50
11	24UFY111P	CC1	ASH	Liberal Learning Course:Yoga and Meditation	0	1	2	2	--	-	50	--	50
	24UFY112P			Liberal Learning Course: Physical Education (Sports)									
	24UFY113P			Liberal Learning Course : Music									
	24UFY114P			Liberal Learning Course: National Service Scheme (NSS)									
				Total	15	3	10	23	180	270	150	100	700

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

SECOND SEMESTER

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1.	24UFY2A1T	BSC	ASH	Basic calculus & differential Equations	3	1	0	4	40	60	--	--	100
2.	24UFY2B2T	BSC	ASH	Engineering Physics	3	0	0	3	40	60		--	100
3.	24UFY2B2P	BSC	ASH	Lab: Engineering Physics	0	0	2	1	--	--	25	25	50
4.	24UFY2D3T	ESC	CV	Engineering Mechanics	3	0	0	3	40	60	--	--	100
5.	24UFY2D3P	ESC	CV	Lab: Engineering Mechanics	0	0	2	1	--	--	25	25	50
6.	24UFY2B4T	ESC	ME	Computer Aided Graphics.	1	0	0	1	20	30	--	--	50
7.	24UFY2B4P	ESC	ME	Lab : Computer Aided Graphics	0	0	2	1	--	--	25	25	50
8.	24UFY2A5P	ESC	ME	Lab: Engineering Workshop	0	0	2	1	--	--	25	25	50
9.	24UFY2B6T	AEC	ASH	Communication Skills	1	0	0	1	20	30	--	--	50
10.	24UFY2B6P	AEC	ASH	Lab: Communication Skills	0	0	2	1	--	--	25	25	50
11	24UFY2A7P	SEC2	ASH	Skill Enhancement in Analytical Techniques	0	1	2	2	--	--	25	25	50
12.	24UFY211P	CC2	ASH	Liberal Learning Course: Creative Arts	0	1	2	2	--	--	50	--	50
	24UFY212P			Liberal Learning Course: Professional Skills									
	24UFY213P			Liberal Learning Course: Photography & Film Making									
	24UFY214P			Liberal Learning Course: Foreign Language (German Or French)									
				Total	11	3	14	21	160	240	200	150	750

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

THIRD SEMESTER

Sr. No	Course Code	Course Category	BoS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	24UEL301T	PCC	EE	Electrical Measurement and Instrumentation	3	0	0	3	40	60	-	-	100
2	24UEL301P	PCC	EE	Lab: Electrical Measurement and Instrumentation	0	0	2	1	-	-	25	25	50
3	24UEL302T	PCC	EE	Network Analysis	3	0	0	3	40	60	-	-	100
4	24UEL302P	PCC	EE	Lab: Network Analysis	0	0	2	1	-	-	25	25	50
5	24UEL303P	PCC	EE	Programming Techniques	0	1	2	2	-	-	25	25	50
6	24UOE3XXT	OE	EE	Open Elective: 01	3	0	0	3	40	60	-	-	100
7	24UBS312T	MDM	ASH	Multidisciplinary Minor:01	3	0	0	3	40	60	-	-	100
8	24UBS306T	EMC	ASH	Digital Economy and Management	2	0	0	2	20	30	-	-	50
9	24UBS307T	VEC	ASH	Universal Human Values	2	0	0	2	20	30	-	-	50
10	24UEL308P	CEP	EE	Community Engagement Services / Activities	0	0	4	2	-	-	50	-	50
				Total	16	1	10	22	200	300	125	75	700

Open Elective:01

S.N.	Course Code	Course Name
1	24UOE342T	Sources of Electrical Energy Generation
2	24UOE343T	Electrical Appliances

Multidisciplinary Minor:01

S.N.	Course Code	Course Name
1	24UBS312T	Linear Algebra and Transforms

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

FOURTH SEMESTER

Sr. No.	Course Code	Course Category	BoS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	24UEL401T	PCC	EE	Electrical Machines	3	0	0	3	40	60	-	-	100
2	24UEL401P	PCC	EE	Lab: Electrical Machines.	0	0	2	1	-	-	25	25	50
3	24UEL402T	PCC	EE	Devices and Circuits	3	0	0	3	40	60	-	-	100
4	24UEL402P	PCC	EE	Lab : Devices and Circuits	0	0	2	1	-	-	25	25	50
5	24UCT410T/ 24UME408T/ 24UBS412T/ 24UET407T	MDM	CT/ ME/ ASH/ ET	Multidisciplinary Minor:02	2	0	0	2	20	30	-	-	50
6	24UEL4XXT	OE	EE	Open Elective:02	2	0	0	2	20	30	-	-	50
7	24UEL403P	VSEC	EE	Electrical Workshop	0	0	4	2	-	-	25	25	50
8	24UBS407T	AEC	ASH	Professional Communication	2	0	0	2	20	30	-	-	50
9	24UBS408T	EMC	ASH	Entrepreneurship Development & Startup	2	0	0	2	20	30	-	-	50
10	24UBS410T	VEC	ASH	Environmental Science	2	0	0	2	20	30	-	-	50
				Total	16	0	8	20	180	270	75	75	600

Open Elective:02		
S. N.	Course Code	Course Name
1	24UOE439T	Sensors and Transducers
2	24UOE440T	Network Theory and Machines

Multidisciplinary Minor :02		
S.N.	Course Code	Course Name
1	24UCT410T	Fundamentals of Web Technology
2	24UME408T	Engineering Thermodynamics
3	24UBS412T	Introduction to Statistics with Probability
4	24UET407T	Electronics Communication System

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

FIFTH SEMESTER

Sr. No.	Course Code	Course Category	BoS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	25UEL501T	PCC	EE	Control System	3	1	0	4	40	60	-	-	100
2	25UEL501P	PCC	EE	Lab: Control System	0	0	2	1	-	-	25	25	50
3	25UEL502T	PCC	EE	Power Electronics	3	0	0	3	40	60	-	-	100
4	25UEL502P	PCC	EE	Lab: Power Electronics	0	0	2	1	-	-	25	25	50
5	25UEL503T	PCC	EE	Power System	3	0	0	3	40	60	-	-	100
6	25UEL5XXT	PEC	EE	Program Elective Course :01	3	0	0	3	40	60	-	-	100
7	25UEL5XXP	PEC	EE	Lab: Program Elective Course:01	0	0	2	1	-	-	25	25	50
8	25UEL504P	MDM	EE	Multidisciplinary Minor :03	0	0	4	2	-	-	100	-	100
9	25UOE5XXT	OE	EE	Open Elective:03	2	0	0	2	20	30	-	-	50
10	25UEL505P	VSEC	EE	Lab: Electrical Drawing & Simulation	0	1	2	2	-	-	25	25	50
				Total	14	2	12	22	180	270	200	100	750

Open Elective: 03		
S.N.	Course Code	Course Name
1	25UOE541T	Electric Vehicle: An introduction
2	25UOE542T	Power Plant Engineering

Multidisciplinary Minor :03		
S.N.	Course Code	Course Name
1	25UEL504P	Employability Enhancement Skills

Program Elective Course:01		
S.N.	Course Code	Course Name
1	25UEL521T	Power Station Practice
2	25UEL521P	Lab: Power Station Practice
3	25UEL522T	Electrical Drives & their Controls
4	25UEL522P	Lab: Electrical Drives & their Controls
5	25UEL523T	Introduction to Electrical Vehicle
6	25UEL523P	Lab: Introduction to Electrical Vehicle

BOS Chairman
Dr. R. A. Keswani

Dean Academics
Dr.(Mrs.) S. N. Rao

Principal
Dr. S. A. Dhale

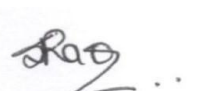


SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

SIXTH SEMESTER

Sr. No.	Course Code	Course Category	BoS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	25UEL601T	PCC	EE	High Voltage Engineering	3	0	0	3	40	60	-	-	100
2	25UEL601P	PCC	EE	Lab: High Voltage Engineering	0	0	2	1	-	-	25	25	50
3	25UEL602T	PCC	EE	Advanced Power System	3	0	0	3	40	60	-	-	100
4	25UEL602P	PCC	EE	Lab: Advanced Power System	0	0	2	1	-	-	25	25	50
5	25UEL603T	PCC	EE	Electrical Safety and Standards	2	1	0	3	20	30	-	-	50
6	25UEL6XXT	PEC	EE	Program Elective Course :02	3	0	0	3	40	60	-	-	100
7	25UCT607T/ 25UME608T/ 25UIT606T/ 25UET607T	MDM	(CT/ ME/ IT/ ETC)	Multidisciplinary Minor:04	3	0	0	3	40	60	-	-	100
8	25UCT607P/ 25UME608P/ 25UIT606P/ 25UET607P	MDM	(CT/ ME/ IT/ ETC)	Lab: Multidisciplinary Minor:04	0	0	2	1	-	-	25	25	50
9	25UEL604P	VSEC	EE	Lab: Vocational Skill Development	0	0	2	1	-	-	25	25	50
10	25UEL605T	RM	EE	Research Methodology	2	0	0	2	20	30	-	-	50
11	25UEL605P	RM	EE	Lab: Research Methodology	0	0	2	1	-	-	25	25	50
				Total	16	1	10	22	200	300	125	125	750
Multidisciplinary Minor :04					Program Elective Course :02								
S.N.	Course Code	Course Name			S.N.	Course Code	Course Name						
1	25UCT607T	Data Structure Using C			1	25UEL621T	Computer Applications in Power System						
2	25UCT607P	Lab: Data Structure Using C			2	25UEL622T	Advanced Control System						
3	25UME608T	Heat Transfer			3	25UEL623T	Advanced Power Electronics						
4	25UME608P	Lab: Heat Transfer			4	25UEL624T	Testing and Maintenance of Electrical Equipment						
5	25UIT606T	Python Programming for Data Analytics											
6	25UIT606P	Lab: Python Programming for Data Analytics											
7	25UET607T	Sensors & System Analysis											
8	25UET607P	Lab: Sensors & System Analysis											


BOS Chairman
Dr. R. A. Keswani


Dean Academics
Dr.(Mrs.) S. N. Rao


Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

SEVENTH SEMESTER

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	26UEL701T	PCC	EE	Controllers for Industrial Applications	3	0	0	3	40	60	-	-	100
2	26UEL701P	PCC	EE	Lab: Controllers for Industrial Applications	0	0	2	1	-	-	25	25	50
3	26UEL702T	PCC	EE	Power System Protection	3	0	0	3	40	60	-	-	100
4	26UEL702P	PCC	EE	Lab: Power System Protection	0	0	2	1	-	-	25	25	50
5	26UEL703P	PCC	EE	Lab: Renewable Energy	0	1	2	2	-	-	25	25	50
6	26UEL7XXT	PEC	EE	Program Elective Course :03	3	0	0	3	40	60	-	-	100
7	26UEL7XXT	PEC	EE	Program Elective Course :04	3	0	0	3	40	60	-	-	100
8	26UCT709T/ 26UME708T/ 26UIT705T/ 26UET705T	MDM	(CT/ ME/ IT/ETC)	Multidisciplinary Minor:05	2	0	0	2	20	30	-	-	50
9	26UEL704P	Project	EE	Project	0	0	8	4	-	-	50	50	100
				Total	14	1	14	22	180	270	125	125	700

Program Elective Course :03

S. N.	Course Code	Course Name
1	26UEL721T	Electrical Distribution System
2	26UEL722T	Optimization Techniques
3	26UEL723T	Flexible AC Transmission System
4	26UEL724T	Energy Storage System and EV Charging

Program Elective Course :04

S.N.	Course Code	Course Name
1	26UEL731T	EHVAC-DC Transmission System
2	26UEL732T	Digital Control System
3	26UEL733T	Power Semiconductor based Drives
4	26UEL734T	Energy Management & Audit

Multidisciplinary Minor :05

S.N.	Course Code	Course Name
1	26UCT709T	Object Oriented Programming using C++
2	26UME708T	Energy Conversion
3	26UIT705T	Data Visualizations
4	26UET705T	PCB Design & Fabrication

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

EIGHTH SEMESTER

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	26UEL8XXT	PEC	EE	Program Elective Course :05 (MOOC)*	3	0	0	3	40	60	-	-	100
2	26UEL8XXT	PEC	EE	Program Elective Course :06 (MOOC)*	3	0	0	3	40	60	-	-	100
3	26UEL801P	Internship /OJT	EE	Internship / Project/ on job training	0	0	24	12	-	-	150	150	300
				Total	6	0	24	18	80	120	150	150	500

*The list for MOOC Courses will be shared at the beginning of semester.

End Semester Examination will be conducted by Priyadarshini College of Engineering.

BOS Chairman
Dr. R. A. Keswani

Dean Academics
Dr.(Mrs.) S. N. Rao

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Annexure-1

Basket of Multidisciplinary Minor Subjects

Basket 1: SOFTWARE DEVELOPMENT

Sr. No.	Semester	Course Code	BOS/Department	Course Name	Credits
1	III	24UBS312T	ASH	Linear Algebra and Transforms	3
2	IV	24UCT410T	CT	Fundamentals of Web Technology	2
3	V	25UEL504P	EE	Employability Enhancement Skills	2
4	VI	25UCT607T	CT	Data Structure Using C	3
5	VI	25UCT607P	CT	Lab: Data Structure Using C	1
6	VII	26UCT709T	CT	Object Oriented Programming using C++	2
Total					13

Basket 2 : THERMAL POWER

1	III	24UBS312T	ASH	Linear Algebra and Transforms	3
2	IV	24UME408T	ME	Engineering Thermodynamic	2
3	V	25UEL504P	EE	Employability Enhancement Skills	2
4	VI	25UME608T	ME	Heat Transfer	3
5	VI	25UME608P	ME	Lab: Heat Transfer	1
6	VII	26UME708T	ME	Energy Conversion	2
Total					13

Basket 3 : DATA ANALYTICS

1	III	24UBS312T	ASH	Linear Algebra and Transforms	3
2	IV	24UBS412T	ASH	Introduction to Statistics with Probability	2
3	V	25UEL504P	EE	Employability Enhancement Skills	2
4	VI	25UIT606T	IT	Python Programming for Data Analytics	3
5	VI	25UIT606P	IT	Lab: Python Programming for Data Analytics	1
6	VII	26UIT705T	IT	Data Visualizations	2
Total					13

Basket 4 : ELECTRONIC SYSTEM DESIGN

1	III	24UBS312T	ASH	Linear Algebra and Transforms	3
2	IV	24UET407T	ETC	Electronics Communication System	2
3	V	25UEL504P	EE	Employability Enhancement Skills	2
4	VI	25UET607T	ETC	Sensor and System Analysis	3
5	VI	25UET607P	ETC	Lab: Sensor and System Analysis	1
6	VII	26UET705T	ETC	PCB Design & Fabrication	2
Total					13

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Annexure-2
Basket of Open Elective Subjects

Semester III

Sr. No.	Course Code	Course Name OE:01
1.	24UOE342T	Sources of Electrical Energy Generation
2.	24UOE343T	Electrical Appliances

Semester IV

Sr. No.	Course Code	Course Name OE:02
1.	24UOE439T	Sensors and Transducers
2.	24UOE440T	Network Theory and Machines

Semester V

Sr. No.	Course Code	Course Name OE:03
1.	25UOE541T	Electric Vehicle: An introduction
2.	25UOE542T	Power Plant Engineering

BOS Chairman
Dr. R. A. Keswani

Dean Academics
Dr. (Mrs.) S. N. Rao

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Annexure-3
List of Programme Elective Courses (PEC)

Semester-V

Sr. No.	Course Code	Course Name PEC: 01
1.	25UEL521T	Power Station Practice
2.	25UEL521P	Lab: Power Station Practice
3.	25UEL522T	Electrical Drives & their Controls
4.	25UEL522P	Lab: Electrical Drives & their Controls
5.	25UEL523T	Introduction to Electrical Vehicle
6.	25UEL523P	Lab: Introduction to Electrical Vehicle

Semester-VI

Sr. No.	Course Code	Course Name PEC:02
1.	25UEL621T	Computer Applications in Power System
2.	25UEL622T	Advanced Control System
3.	25UEL623T	Advanced Power Electronics
4.	25UEL624T	Testing and Maintenance of Electrical Equipment

Semester-VII

Sr. No.	Course Code	Course Name PEC:03	Course Code	Course Name PEC: 04
1.	26UEL721T	Electrical Distribution System	26UEL731T	EHVAC-DC Transmission System
2.	26UEL722T	Optimization Techniques	26UEL732T	Digital Control System
3.	26UEL723T	Flexible AC Transmission System	26UEL733T	Power Semiconductor based Drives
4.	26UEL724T	Energy Storage System and EV Charging	26UEL734T	Energy Management & Audit

BOS Chairman
Dr. R. A. Keswani

Dean Academics
Dr. (Mrs.) S. N. Rao

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Annexure-4
B. Tech. Honors in E-Mobility

Sr. No.	Sem	Course Code	Course Category	BoS / Dept.	Course Name	Contact Hours				Marks				Total Marks
										Theory		Practical		
						L	A	P	Credits	CE	ESE	CE	ESE	
1	IV	24UHEEL4T	PCC	EE	Introduction to E-Mobility	3	1	0	4	40	60	-	-	100
2	V	25UHEEL5T	PCC	EE	Electrical Drives for EVs	3	0	0	3	40	60	-	-	100
3	V	25UHEEL5P	PCC	EE	Lab: Electrical Drives for EVs	0	0	2	1	-	-	25	25	50
4	VI	25UHEEL6T	PCC	EE	Power Electronic for EV Applications	3	0	0	3	40	60	-	-	100
5	VI	25UHEEL6P	PCC	EE	Lab: Power Electronic for EV Applications	0	0	2	1	-	-	25	25	50
6	VII	26UHEEL7T	PCC	EE	EV Charging & Grid Integration	3	0	0	3	40	60	-	-	100
7	VII	26UHEEL7P	Project	EE	Dissertation	0	0	6	3	-	-	50	50	100
					Total	12	1	10	18	160	240	100	100	600

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Annexure-5
B. Tech. Double Minor (Multidisciplinary) in Electrical Vehicle

Sr. No.	Sem	Course Code	Course Category	BoS/ Dept.	Course Name	Contact Hours				Marks				Total Marks
										Theory		Practical		
						L	A	P	Credits	CE	ESE	CE	ESE	
1	IV	24UDMEL4T	PCC	EE	Basics of Electric & Hybrid Vehicle	3	1	0	4	40	60	-	-	100
2	V	25UDMEL5T	PCC	EE	Electric Vehicle Battery Technology	3	0	0	3	40	60	-	-	100
3	V	25UDMEL5P	PCC	EE	Lab: Electric Vehicle Battery Technology	0	0	2	1	-	-	25	25	50
4	VI	25UDMEL6T	PCC	EE	Electric Vehicle Motor Controls	3	0	0	3	40	60	-	-	100
5	VI	25UDMEL6P	PCC	EE	Lab: Electric Vehicle Motor Controls	0	0	2	1	-	-	25	25	50
6	VII	25UDMEL7T	PCC	EE	EV Vehicle Design and Analysis	3	0	0	3	40	60	-	-	100
7	VII	25UDMEL7P	Project	EE	Dissertation	0	0	6	3	-	-	50	50	100
					Total	12	1	10	18	160	240	100	100	600

BOS Chairman
Dr. R. A. Keswani

Dean Academics
Dr. (Mrs.) S. N. Rao

Principal
Dr. S. A. Dhale



SCHEME OF EXAMINATION
B. TECH. ELECTRICAL ENGINEERING

Exit Scheme
Certificate Course After B.Tech First year (08 credits)

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hours				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	24UECCFLT	PCC	EE	Electrical Measurement & Safe Installation Practices.	4	0	0	4	40	60	-	-	100
2	24UECCFLP	PCC	EE	Skill Based Lab on Electrical Measurement & Safe Installation Practices	0	0	8	4	-	-	50	50	100
				Total	4	0	8	8	40	60	50	50	200

Diploma Course After B.Tech. Second year (08 credits)

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hour				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	25UEDCELT	PCC	EE	Testing & Maintenance of Electrical Equipment	4	0	0	4	40	60	-	-	100
2	25UEDCELP	PCC	EE	Skill Based Lab./Internship on Testing & Maintenance of Electrical Equipment	0	0	8	4	-	-	50	50	100
				Total	4	0	8	8	40	60	50	50	200

B.Vocational Course After B.Tech. Third Year (08 Credits)

Sr. No.	Course Code	Course Category	BOS/ Dept	Course Name	Contact Hour				Marks				Total Marks
									Theory		Practical		
					L	T	P	Credits	CE	ESE	CE	ESE	
1	26UEBVELT	PCC	EE	PLC & Automation	4	0	0	4	40	60	-	-	100
2	26UEBVLP	PCC	EE	Skill Based Lab son PLC & Automation / Project/Internship /OJT	0	0	8	4	-	-	50	50	100
				Total	4	0	8	8	40	60	50	50	200

*Abbreviation: E: Exit Course, CC: Certificate Course, DC: Diploma Course, BV: B. Vocational

R. A. Keswani

BOS Chairman
Dr. R. A. Keswani

S. N. Rao

Dean Academics
Dr.(Mrs.) S. N. Rao

S. A. Dhale

Principal
Dr. S. A. Dhale