SCHEME -2013

ELECTRICAL AND ELECTRONICS ENGINEERING (E)

Combined I and II Semesters

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.101	Engineering Mathematics - I (ABCEFHMNPRSTU)	6	2	1	0	50	3	100	150
13.102	Engineering Physics (ABCEFHMNPRSTU)	6	2	1	0	50	3	100	150
13.103	Engineering Chemistry (ABCEFHMNPRSTU)	6	2	1	0	50	3	100	150
13.104	Engineering Graphics (ABCEFHMNPRSTU)	6	1	0	2	50	3	100	150
13.105	Engineering Mechanics (ABCEFHMNPRSTU)	6	2	1	0	50	3	100	150
13.106	Basic Civil Engineering (ABEFHMNPRSTU)	6	2	1	0	50	3	100	150
13.107	Basic Mechanical Engineering (ACEFRT)	6	2	1	0	50	3	100	150
13.108	Fundamentals of Electrical Engineering (E)	6	2	1	0	50	3	100	150
13.109	Basic Electronics Engineering (BCEHMNPSU)	6	2	1	0	50	3	100	150
13.110	Mechanical Engineering Workshop (ABCEFHMNPRSTU)	2	0	0	1	25	3	50	75
13.111	Electrical & Electronics Engineering Workshop (ABCEFHMNPRSTU)	2	0	0	1	25	3	50	75
	Total	**58**	**17**	**8**	**4**	**500**		**1000**	**1500**

Third Semester

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.301	Engineering Mathematics-II (ABCEFHMNPRSTU)	4	3	1	-	50	3	100	150
13.302	Humanities (BEFMRSU)	3	3	0	0	50	3	100	150
13.303	Networks and Systems (E)	4	2	2	0	50	3	100	150
13.304	Analog Electronics (E)	4	2	2	0	50	3	100	150
13.305	DC Machines and Transformers (E)	4	2	2	0	50	3	100	150
13.306	Hydraulic Machines and Heat Engines (E)	4	2	2	0	50	3	100	150
13.307	Electronic Circuits Lab (E)	3	0	0	3	50	3	100	150
13.308	Hydraulic Machines and Heat Engines Lab (E)	3	0	0	3	50	3	100	150
	Total	**29**	**14**	**9**	**6**	**400**		**800**	**1200**

Fourth Semester

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.401	Engineering Mathematics -III (E)	4	3	1	-	50	3	100	150
13.402	Digital Electronics and Logic Design (E)	3	2	1	-	50	3	100	150
13.403	Engineering Electromagnetics (E)	3	2	1	-	50	3	100	150
13.404	Electrical Measurements and Measuring Instruments (E)	4	3	1	-	50	3	100	150
13.405	Power Electronics (E)	4	2	2	-	50	3	100	150
13.406	Power Generation, Transmission and Distribution (E)	3	2	1		50	3	100	150
13.407	Electrical Machines Lab I (E)	4	0	0	4	50	3	100	150
13.408	Digital Circuits Lab (E)	4	0	0	4	50	3	100	150
	Total	**29**	**14**	**7**	**8**	**400**		**800**	**1200**

Fifth Semester

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.501	Engineering Mathematics IV (E)	4	3	1	-	50	3	100	150
13.502	Synchronous Machines(E)	4	2	2	0	50	3	100	150
13.503	Switchgear and Protection(E)	3	2	1	0	50	3	100	150
13.504	Control Systems(E)	4	2	2	0	50	3	100	150
13.505	Electronic Instrumentation(E)	3	2	1	0	50	3	100	150
13.506	ELECTIVE I	3	2	1	0	50	3	100	150
13.507	Power Electronics Lab(E)	4	0	0	4	50	3	100	150
13.508	Measurements & Instrumentation Lab(E)	4	0	0	4	50	3	100	150
	Total	**29**	**13**	**8**	**8**	**400**		**800**	**1200**

Sixth Semester

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.601	Advanced Control Systems (E)	4	2	2	0	50	3	100	150
13.602	Induction Machines and Special Machines(E)	3	2	1	0	50	3	100	150
13.603	Microprocessors & Applications (E)	4	2	2	0	50	3	100	150
13.604	Numerical Techniques & Computer Programming(E)	3	2	1	0	50	3	100	150
13.605	Power System Analysis and Stability(E)	4	2	2	0	50	3	100	150
13.606	ELECTIVE II	3	2	1		50	3	100	150
13.607	Microprocessor Lab (E)	2	0	0	2	25	2	50	75
13.608	Software Lab(E)	2	0	0	2	25	2	50	75
13.609	Systems & Control Lab(E)	4	0	0	4	50	3	100	150
	Total	**29**	**12**	**9**	**8**	**400**		**800**	**1200**

Seventh Semester

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.701	Embedded Systems (E)	3	2	1	0	50	3	100	150
13.702	Digital Signal Processing (E)	3	2	1	0	50	3	100	150
13.703	Power Semiconductor Drives (E)	3	2	1	0	50	3	100	150
13.704	Communication Systems (E)	3	2	1	0	50	3	100	150
13.705	Industrial Engineering & Management (E)	3	3	0	0	50	3	100	150
13.706	ELECTIVE III	3	2	1	0	50	3	100	150
13.707	Seminar	2	0	0	2	50		0	50
13.708	Electrical Machines Lab II (E)	4	0	0	4	50	3	100	150
13.709	Power Systems Lab (E)	4	0	0	4	50	3	100	150
13.710	Industrial Visit & Project Preliminary Work	1	0	0	1	50		0	50
	Total	**29**	**13**	**5**	**11**	**500**		**800**	**1300**

Eighth Semester

Course No	Name of subject	Credits	Weekly load, hours			C A Marks	Exam Duration Hrs	U E Max Marks	Total Marks
			L	T	D/P				
13.801	Electrical System Design (E)	4	2	2	0	50	3	100	150
13.802	Electrical Machine Design (E)	4	2	2	0	50	3	100	150
13.803	Electrical Drawing (E)	4	0	0	4	50	3	100	150
13.804	Electric Power Utilisation & Electrical Safety (E)	4	3	1	0	50	3	100	150
13.805	ELECTIVE IV	4	2	2	0	50	3	100	150
13.806	ELECTIVE V	4	2	2	0	50	3	100	150
13.807	Project & Viva Voce (E)	5	0	0	5	200		100	300
	Total	**29**	**11**	**9**	**9**	**500**		**700**	**1200**

13. 506 Elective I

13.506.1	Engineering Material Science (E)
13.506.2	Operations Research (E)
13.506.3	Sustainable Development (E)
13.506.4	New and renewable Energy Sources (E)
13.506.5	Disaster Management (E)
13.506.6	Soft Computing (E)
13.506.7	Professional Communication (E)

13.606 Elective II

13.606.1	Biomedical Instrumentation (E)
13.606.2	Optical Instrumentation (E)
13.606.3	Switch Mode Power Converters (E)
13.606.4	Finite Element Methods (E)
13.606.5	Computer Organisation (E)
13.606.6	Software Engineering (E)

13.706 Elective III

13.706.1	Object Oriented Programming (E)
13.706.2	Modern Operating Systems (E)
13.706.3	Computer Aided Power System Analysis (E)
13.706.4	Power Quality (E)
13.706.5	Design of Digital Control Systems (E)
13.706.6	High Voltage Engineering (E)
13.706.7	Nano Technology (E)

13. 805 Elective IV

13.805.1	Power System Instrumentation (E)
13.805.2	Computer Networks (E)
13.805.3	Analysis of Electrical Machinery (E)
13.805.4	Robotics (E)
13.805.5	Non-linear Systems (E)
13.805.6	Wavelets and Applications (E)

13. 806 Elective V

13.806.1	Energy Conservation and Management (E)
13.806.2	HVDC and FACTS (E)
13.806.3	Powe Electronic Applications in Power Systems (E)
13.806.4	Philosophy of Science and Technology (E)
13.806.5	Digital Image Processing (E)
13.806.6	Electric and Hybrid Vehicles (E)
13.806.7	Industrial automation (E)