VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM
SCHEME OF TEACHING AND EXAMINATION

I SEMESTER B.E./B.TECH.

PHYSICS GROUP

Sl. No.	Subject Code	Subject	Teaching Department	Board	Theory /Lab/ Drawing (Hrs/ Week)	Examination Marks		
						Th./Pr.	I.A.	Total
1	10MAT11	Engineering Maths-I	Maths	Basic Sc.	4 (T)	100	25	125
2	10PHY12	Engineering Physics	Physics	Basic Sc.	4 (T)	100	25	125
3	10CIV13	Elements of Civil Engg. & Engineering Mechanics	Civil Engg.	Civil Engg.	4 (T)	100	25	125
4	10EME14	Elements of Mechanical Engg.	Mech. Engg.	Mech. Engg.	4 (T)	100	25	125
5	10ELE15	Basic Electrical Engg.	E & E	E & E	4 (T)	100	25	125
6	10WSL16	Workshop Practice	Mech., Auto, IP, IEM, Mfg. Engg.	Mech. Engg.	3 (L)	50	25	75
7	10PHYL17	Engg. Physics Lab	Physics	Basic Sc.	3 (L)	50	25	75
8	10CIP18	*Constitution of India & Professional Ethics	Any Department		2 (T)	50	25	75
9		Language (Kan.)	Humanities		2 (T)	---	---	---
				Total	30	**600	**175	775

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II SEMESTER B.E./B.TECH.

PHYSICS GROUP

Sl. No.	Subject Code	Subject	Teaching Department	Board	Theory /Lab/ Drawing (Hrs/ Week)	Examination Marks		
						Th./Pr.	I.A.	Total
1	10MAT21	Engineering Maths-II	Maths	Basic Sc.	4 (T)	100	25	125
2	10PHY22	Engineering Physics	Physics	Basic Sc.	4 (T)	100	25	125
3	10CIV23	Elements of Civil Engg. & Engineering Mechanics	Civil Engg.	Civil Engg.	4 (T)	100	25	125
4	10EME24	Elements of Mechanical Engg.	Mech. Engg.	Mech. Engg.	4 (T)	100	25	125
5	10ELE25	Basic Electrical Engg.	E & E	E & E	4 (T)	100	25	125
6	10WSL26	Workshop Practice	Mech./IP/Auto/ Mfg.Engg./ IEM	Mech. Engg.	3 (L)	50	25	75
7	10PHYL27	Engg. Physics Lab	Physics	Basic Sc.	3 (L)	50	25	75
8	10CIP28	*Constitution of India & Professional Ethics	Any Department	Civil	2 (T)	50	25	75
9		Language (Kan.)	Humanities		2 (T)	---	---	---
				Total	**30**	**600	**175	775

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SCHEME OF TEACHING & EXAMINATION
III SEMESTER B. E. BIO-TECHNOLOGY

Sl. No.	Subject Code	Title	Teaching Dept.	Teaching (Theory/ lab (Hrs/Week)	Examination Scheme (Max. Marks)		
					Theory / Practical	I A	Total Marks
1	10MAT-31	Engineering Mathematics – III	Maths	04	100	25	125
2	10BT-32	Introduction to Unit Operations	BT/ChE	04	100	25	125
3	10BT-33	Human Physiology	BT	04	100	25	125
4	10BT-34	Biochemistry	BT	04	100	25	125
5	10BT-35	Microbiology	BT	04	100	25	125
6	10BT-36	Cell Biology & Genetics	BT	04	100	25	125
7	10BTL-37	Biochemistry Lab	BT	03	50	25	75
8	10BTL-38	Unit Operations Lab	BT/ChE/ME	03	50	25	75
		Ttoal		**30**	**700**	**200**	**900**

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SCHEME OF TEACHING & EXAMINATION
IV SEMESTER B. E. BIO-TECHNOLOGY

Sl. No.	Subject Code	Title	Teaching Dept.	Teaching (Theory/ lab (Hrs/Week)	Examination Scheme (Max. Marks)		
					Theory / Practical	I A	Total Marks
1	10BT-41	Biostatistics and Biomodeling	BT	04	100	25	125
2	10BT-42	Biochemical Thermodynamics	BT/ChE/ME	04	100	25	125
3	10BT-43	Structural Biology	BT	04	100	25	125
4	10BT-44	Molecular Biology	BT	04	100	25	125
5	10BT-45	Basics of Computer Applications	ET/CSE/ISE/MCA	04	100	25	125
6	10BT-46	Bioprocess Principles & Calculations	BT/ChE	04	100	25	125
7	10BTL-47	Cell & Molecular Biology Lab	BT	03	50	25	75
8	10BTL-48	Microbiology Lab	BT	03	50	25	75
		Ttoal		**30**	**700**	**200**	**900**

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SCHEME OF TEACHING & EXAMINATION
V SEMESTER B.E. BIO-TECHNOLOGY

Sl. No.	Subject Code	Title	Teaching Dept.	Teaching (Theory/ lab (Hrs/Week)	Examination Scheme (Max. Marks)		
					Theory / Practical	IA	Total Marks
1	10AL-51	Management and Entrepreneurship	MBA/Any Dept	04	100	25	125
2	10BT-52	Biokinetics & Bioreaction Engg	BT/ChE	04	100	25	125
3	10BT-53	Biosensors & Bioinstrumentation	BT/IT/ ML/BM	04	100	25	125
4	10BT-54	Immunotechnology	BT	04	100	25	125
5	10BT-55	Genetic Engg. & Applications	BT	04	100	25	125
6	10BT-56	Bioinformatics	BT	04	100	25	125
7	10BTL-57	Genetic Engineering and Immunotechnology Lab	BT	03	50	25	75
8	10BTL-58	Bioinformatics Lab	BT	03	50	25	75
		Ttoal		30	700	200	900

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SCHEME OF TEACHING & EXAMINATION
VI SEMESTER B. E. BIO-TECHNOLOGY

Sl. No.	Subject Code	Title	Teaching Dept.	Teaching (Theory/ lab (Hrs/Week)	Examination Scheme (Max. Marks)		
					Theory / Practical	I A	Total Marks
1	10BT-61	Bioprocess Control & Automation	BT/ChE	04	100	25	125
2	10BT-62	Clinical & Pharmaceutical Biotechnology	BT	04	100	25	125
3	10BT-63	Enzyme Technology & Biotransformation	BT	04	100	25	125
4	10BT-64	Genomics and Proteomics	BT	04	100	25	125
5	10BT-65	Bioprocess Equipment Design & CAED	BT/ChE/ME	04	100	25	125
6	10BT-66	Elective – A	BT/ChE/ME/CSE	04	100	25	125
7	10BTL-57	Bioprocess Control & Automation Lab	BT/ChE	03	50	25	75
8	10BTL-58	Biokinetics & Enzyme Technology Lab	BT	03	50	25	75
		Ttoal		30	700	200	900

Elective A :

10BT-661	Animal BT
10BT-662	Plant BT
10BT-663	Microbial BT
10BT-664	Perl Programming
10BT-665	Transport Phenomena

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SCHEME OF TEACHING & EXAMINATION
VII SEMESTER B. E. BIO-TECHNOLOGY

Sl. No.	Subject Code	Title	Teaching Dept.	Teaching (Theory/ lab (Hrs/Week)	Examination Scheme (Max. Marks)		
					Theory / Practical	I A	Total Marks
1	10BT-71	Economics & Plant Design	BT/ChE	04	100	25	125
2	10BT-72	Upstream Process Technology	BT	04	100	25	125
3	10BT-73	Downstream Process Technology	BT/ChE	04	100	25	125
4	10BT-74	Food Biotechnology	BT	04	100	25	125
5	10BT-75	Elective – B	BT/ChE/CSE/ISE	04	100	25	125
6	10BT-76	Elective – C	BT/ChE/CSE/ISE	04	100	25	125
7	10BTL-77	Upstream processing Lab	BT	03	50	25	75
8	10BTL-78	Downstream processing Lab	BT/ChE	03	50	25	75
		Total		30	700	200	900

Elective B :

10BT-751	Aqua Culture & Marine BT
10BT-752	Dairy BT
10BT-753	Forensic Science
10BT-754	Data structures with C
10BT-755	Bioreactor Design Concepts

Elective C :

10BT-761	Biochips & Micro array Technology
10BT-762	Biomaterials
10BT-763	Health Diagnostics
10BT-764	Fundamentals of OS & DBMS
10BT-765	CAD & MATLAB

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SCHEME OF TEACHING & EXAMINATION
VIII SEMESTER B. E. BIO-TECHNOLOGY

Sl. No.	Subject Code	Title	Teaching Dept.	Teaching (Theory/ lab (Hrs/Week)	Examination Scheme (Max. Marks)		
					Theory / Practical	I A	Total Marks
1	10BT-81	Project Management & IPR	BT/MBA/ME/IEM	04	100	25	125
2	10BT-82	Bioethics & Biosafety	BT	04	100	25	125
3	10BT-83	Elective – D	BT/ChE/EM	04	100	25	125
4	10BT-84	Elective – E	BT/ChE	04	100	25	125
5	10BT-85	Project Work	BT	15	100	100	200
6	10BT-86	Seminar	BT	09	—	50	50
		Total		40	500	250	750

Elective D

10BT-831	Nano Bio-Technology
10BT-832	Lab to Industrial Scaling
10BT-833	Protein Engg. & Insilico Drug Design
10BT-834	Biomedical Instrumentation
10BT-835	Biomolecular Engineering

Elective E :

10BT-841	Environmental BT
10BT-842	Metabolic Engineering
10BT-843	Medical Informatics
10BT-844	Tissue Engineering
10BT-845	Facilitation, Validation & QC

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SCHEME OF TEACHING & EXAMINATION
BE CIVIL ENGINEERING
III SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Th.	Pr.	Dur-ation	I.A. Max. Marks	Theory/ Pract. Max. Marks	Total Marks Max. Marks
1	10 MAT 31	Engineering Mathematics –III	Maths	4	--	3	25	100	125
2	10 CV 32	Building Materials and Construction Technology	Civil	4	--	3	25	100	125
3	10 CV 33	Strength of Materials	Civil	4	--	3	25	100	125
4	10 CV 34	Surveying – I	Civil	4	--	3	25	100	125
5	10 CV 35	Fluid Mechanics	Civil	4	--	3	25	100	125
6	10 CV 36	Applied Engineering Geology	Civil/Geo.	4	--	3	25	100	125
7	10 CVL 37	Civil Engg. Material Testing Laboratory	Civil	---	3	3	25	50	75
8	10 CVL 38	Surveying Practice – I	Civil	---	3	3	25	50	75
			Total	**22**	**08**	**24**	**200**	**700**	**900**

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SCHEME OF TEACHING & EXAMINATION
BE CIVIL ENGINEERING
IV SEMESTER

S. No	Subject Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Th.	Pr.	Dur-ation	I.A. Max Marks	Theory/ Pract Max. Marks	Total Marks Max. Marks
1	10 MAT 41	Engineering Mathematics –IV	Maths	4	--	3	25	100	125
2	10 CV 42	Concrete Technology	Civil	4	--	3	25	100	125
3	10 CV 43	Structural Analysis – I	Civil	4	--	3	25	100	125
4	10 CV 44	Surveying – II	Civil	4	--	3	25	100	125
5	10 CV 45	Hydraulics and Hydraulic Machines	Civil	4	--	3	25	100	125
6	10 CV 46	Building Planning & Drawing	Civil	1	6	4	25	100	125
7	10 CVL 47	Surveying Practice-II Laboratory	Civil	---	3	3	25	50	75
8	10 CVL 48	Applied Engineering Geology Laboratory	Civil/Geo.	---	3	3	25	50	75
			Total	**21**	**12**	**25**	**200**	**700**	**900**

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SCHEME OF TEACHING AND EXAMINATION
B.E. CIVIL EINGINEERING
V SEMESTER

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10 AL 51	Management & Entrepreneurship	Any Dept.	04	-	03	25	100	125
2	10 CV 52	Design of RCC Structural Elements	Civil	04	--	03	25	100	125
3	10 CV 53	Structural Analysis – II	Civil	04	--	03	25	100	125
4	10 CV 54	Geotechnical Engineering. – I	Civil	04	--	03	25	100	125
5	10 CV 55	Hydrology and Irrigation Engineering	Civil	04	--	03	25	100	125
6	10 CV 56	Transportation Engineering – I	Civil	04	--	03	25	100	125
7	10 CVL 57	Hydraulics and Hydraulic Machinery Lab.	Civil	--	03	03	25	50	75
8	10 CVL 58	Computer Aided Design Lab.	Civil	--	03	03	25	50	75
		TOTAL		**24**	**06**	**24**	**200**	**700**	**900**

SCHEME OF TEACHING AND EXAMINATION
B.E. CIVIL EINGINEERING
VI SEMESTER

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10 CV 61	Environmental Engineering - I	Civil	04	--	03	25	100	125
2	10 CV 62	Design & Drawing of RC structures	Civil	02	03	04	25	100	125
3	10 CV 63	Transportation Engineering – II	Civil	04	--	03	25	100	125
4	10 CV 64	Geotechnical Engineering. – II	Civil	04	--	03	25	100	125
5	10 CV 65	Hydraulic Structures and Irrigation Design-Drawing	Civil	02	03	04	25	100	125
6	10 CV 66x	Elective-I (Group A)	Civil	04	--	03	25	100	125
7	10 CVL 67	Geotechnical Engineering. Lab.	Civil	--	03	03	25	50	75
8	10 CVL 68	Extensive Survey Viva Voce	Civil	--	03	03	25	50	75
		TOTAL		**20**	**12**	**25**	**200**	**700**	**900**

Elective-I (Group A)

10 CV 661 Theory of Elasticity
10 CV 662 Alternative Building Materials and Technologies
10 CV 663 Ground Improvement Techniques
10 CV 664 Advanced Surveying
10 CV 665 Ground Water Hydrology
10 CV 666 Rural Water Supply and Sanitation
10 CV 667 Traffic Engineering

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SCHEME OF TEACHING AND EXAMINATION
B.E. CIVIL EINGINEERING
VII SEMESTER

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10 CV 71	Environmental Engineering.-II	Civil	04	--	03	25	100	125
2	10 CV 72	Design of Steel Structures	Civil	04	--	03	25	100	125
3	10 CV 73	Estimation and Valuation	Civil	04	--	03	25	100	125
4	10 CV 74	Design of Pre Stressed Concrete Structures	Civil	04	--	03	25	100	125
5	10 CV 75x	Elective-II (Group B)	Civil	04	--	03	25	100	125
6	10 CV 76x	Elective-III (Group C)	Civil	04	--	03	25	100	125
7	10 CVL 77	Environmental Engineering. Lab	Civil	--	03	03	25	50	75
8	10 CVL 78	Concrete and Highway Materials lab.	Civil	--	03	03	25	50	75
		TOTAL		**24**	**06**	**24**	**200**	**700**	**900**

Elective-II (Group B)

10 CV 751	Matrix Method of Structural Analysis
10 CV 752	Advanced Design of RC Structures
10 CV 753	Design of Masonry Structures
10 CV 754	Earth and Earth Retaining Structures
10 CV 755	Highway Geometric Design
10 CV 756	Open Channel Hydraulics
10 CV 757	Solid Waste Management

Elective-III (Group C)

10 CV 761	Numerical methods in Civil Engineering
10 CV 762	Rock Mechanics
10 CV 763	Pavement Materials and Construction
10 CV 764	Photogrammetry and Remote Sensing
10 CV 765	Air Pollution and Control
10 CV 766	Design and Drawing of Bridges.: * (2 Hrs of Theory + 3 Hrs of Drawing) * (Exam Duration : 4 Hrs)
10 CV 767	Structural Dynamics

SCHEME OF TEACHING AND EXAMINATION
B.E. CIVIL EINGINEERING
VIII SEMESTER

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10 CV 81	Advanced Concrete Technology	Civil	04	--	03	25	100	125
2	10 CV 82	Design and Drawing of Steel Structures	Civil	02	03	04	25	100	125
3	10 CV 83x	Elective-IV (Group D)	Civil	04	--	03	25	100	125
4	10 CV 84x	Elective-V (Group E)	Civil	04	--	03	25	100	125
5	10 CV 85	Project Work	Civil	--	06	03	100	100	200
6	10 CV 86	Seminar	Civil	--	03	03	50	--	50
		TOTAL		**14**	**12**	**19**	**250**	**500**	**750**

Elective-IV (Group D)

10 CV 831	Advanced Pre-stressed Concrete Structures
10 CV 832	Advanced Foundation Design
10 CV 833	Pavement Design
10 CV 834	Earthquake Resistant Design of Structures
10 CV 835	Industrial Waste Water Treatment
10 CV 836	Construction Management & Engineering Economics.

Elective-V (Group E)

10 CV 841	Finite Element Analysis
10 CV 842	Reinforced Earth Structures
10 CV 843	Urban Transport Planning
10 CV 844	Geographic Information System
10 CV 845	Advanced Design of Steel Structures
10 CV 846	Water Resources Engineering
10 CV 847	Environmental Impact Assessment

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SCHEME OF TEACHING AND EXAMINATION
B.E. COMPUTER SCIENCE AND ENGINEERING
(Common to CSE & ISE)

III SEMESTER

Sl. No	Sub-Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Theory	Pract.	Dura-tion	I.A. Marks	Theory/ Pract.	Total Marks
1	10MAT31	Engineering Mathematics - III	Mathematics	04	-	03	25	100	125
2	10CS32	Electronic Circuits	CSE/ISE	04	-	03	25	100	125
3	10CS33	Logic Design	CSE/ISE	04	-	03	25	100	125
4	10CS34	Discrete Mathematical Structures	CSE/ISE	04	-	03	25	100	125
5	10CS35	Data Structures with C	CSE/ISE	04	-	03	25	100	125
6	10CS36	Object Oriented Programming with C++	CSE/ISE	04	-	03	25	100	125
7	10CSL37	Data Structures with C/C++ Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL38	Electronic Circuits & Logic Design Laboratory	CSE/ISE	-	03	03	25	50	75
		TOTAL		24	06	-	200	700	900

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SCHEME OF TEACHING AND EXAMINATION

B.E. COMPUTER SCIENCE AND ENGINEERING

(Common to CSE & ISE)

IV SEMESTER

Sl. No	Sub-Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Theory	Pract.	Duration	I.A. Marks	Theory/ Pract.	Total Marks
1	10MAT41	Engineering Mathematics - IV	Maths	04	-	03	25	100	125
2	10CS42	Graph Theory and Combinatorics	CSE/ISE	04	-	03	25	100	125
3	10CS43	Design and Analysis of Algorithms	CSE/ISE	04	-	03	25	100	125
4	10CS44	Unix and Shell Programming	CSE/ISE	04	-	03	25	100	125
5	10CS45	Microprocessors	CSE/ISE	04	-	03	25	100	125
6	10CS46	Computer Organization	CSE/ISE	04	-	03	25	50	75
7	10CSL47	Design and Analysis of Algorithms Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL48	Microprocessors Laboratory	CSE/ISE	-	03	03	25	50	75
		TOTAL		24	06	-	200	700	900

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SCHEME OF TEACHING AND EXAMINATION

B.E. COMPUTER SCIENCE AND ENGINEERING

V SEMESTER

Sl. No	Sub-Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Theory	Pract	Duration	I.A. Marks	Theory/ Pract.	Total Marks
1	10IS51	Software Engineering	CSE/ISE	04	-	03	25	100	125
2	10CS52	Systems Software	CSE/ISE	04	-	03	25	100	125
3	10CS53	Operating Systems	CSE/ISE	04	-	03	25	100	125
4	10CS54	Database Management Systems	CSE/ISE	04	-	03	25	100	125
5	10CS55	Computer Networks - 1	CSE/ISE	04	-	03	25	100	125
6	10CS56	Formal Languages and Automata Theory	CSE/ISE	04	-	03	25	100	125
7	10CSL57	Database Applications Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL58	Systems Software & Operating Systems Laboratory	CSE/ISE	-	03	03	25	50	75
		TOTAL		24	06	-	200	700	900

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SCHEME OF TEACHING AND EXAMINATION
B.E. COMPUTER SCIENCE AND ENGINEERING

VI SEMESTER

Sl. No	Sub-Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Theory	Pract.	Duration	I.A. Marks	Theory/ Pract.	Total Marks
1	10AL61	Management and Entrepreneurship	CSE/ISE /MBA	04	-	03	25	100	125
2	10CS62	Unix System Programming	CSE/ISE	04	-	03	25	100	125
3	10CS63/ 10IS662	Compiler Design	CSE/ISE	04	-	03	25	100	125
4	10CS64	Computer Networks - II	CSE/ISE	04	-	03	25	100	125
5	10CS65 / 10IS665	Computer Graphics and Visualization	CSE/ISE	04	-	03	25	100	125
6	10CS66x	Elective I (Group-A)	CSE/ISE	04	-	03	25	100	125
7	10CSL67	Computer Graphics and Visualization Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL68	Unix System Programming and Compiler Design Laboratory	CSE/ISE	-	03	03	25	50	75
TOTAL				24	06	-	200	700	900

Elective -1(Group A)

10CS661/10IS661	Operations Research
10CS662	Signals and Systems
10CS663/10IS663	Data Compression
10CS664/10IS664	Pattern Recognition
10CS665	Stochastic Models and Applications
10CS666/10IS666	Programming Languages

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SCHEME OF TEACHING AND EXAMINATION
B.E. COMPUTER SCIENCE AND ENGINEERING

VII SEMESTER

Sl. No	Sub-Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Theory	Pract.	Duration	I.A. Marks	Theory/ Pract.	Total Marks
1	10CS71	Object-Oriented Modeling and Design	CSE/ISE	04	-	03	25	100	125
2	10CS72/ 10IS752	Embedded Computing Systems	CSE/ISE	04	-	03	25	100	125
3	10CS73	Programming the Web	CSE/ISE	04	-	03	25	100	125
4	10CS74	Advanced Computer Architectures	CSE/ISE	04	-	03	25	100	125
5	10CS75x	Elective II (Group-B)	CSE/ISE	04	-	03	25	100	125
6	10CS76x	Elective III(Group-C)	CSE/ISE	04	-	03	25	100	125
7	10CSL77	Networks Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL78	Web Programming Laboratory	CSE/ISE	-	03	03	25	50	75
TOTAL				24	06	-	200	700	900

Elective -II (Group B)

10CS751/10IS751	Advanced Database Management systems
10CS752	Digital Signal Processing
10CS753/10IS753	Java and J2EE
10CS754/10IS754	Multimedia Computing
10CS755/10IS74	Data Warehousing and Data Mining
10CS756/10IS756	Neural Networks

Elective -III (Group C)

10CS761/10IS761	C# Programming and .Net
10CS762/10IS762	Digital Image Processing
10CS763/10IS763	Game Theory
10CS764/10IS764	Artificial Intelligence
10CS765/10IS765	Storage Area Networks
10CS766/10IS766	Fuzzy Logic

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SCHEME OF TEACHING AND EXAMINATION
B.E. COMPUTER SCIENCE AND ENGINEERING

VIII SEMESTER

Sl. No	Sub-Code	Title	Teaching Dept.	Teaching hours /week		Examination			
				Theory	Pract.	Duration	I.A. Marks	Theory/ Pract.	Total Marks
1	10IS81	Software Architectures	CSE/ISE	04	-	03	25	100	125
2	10CS82	System Modeling and Simulation	CSE/ISE	04	-	03	25	100	125
3	10CS83x	Elective IV(Group-D)	CSE/ISE	04	-	03	25	100	125
4	10CS84x	Elective V(Group-E)	CSE/ISE	04	-	03	25	100	125
5	10CS85	Project Work	CSE	-	06	03	100	100	200
6	10CS86	Seminar	CSE		-	-	50	-	50
TOTAL				16	06		250	500	750

Elective IV – Group D

10CS831/10IS831	Wireless Networks and Mobile Computing
10CS832/10IS832	Web 2.0 and Rich Internet Applications
10CS833	VLSI Design and Algorithms
10CS834/10IS834	Network Management Systems
10CS835/10IS835	Information and Network Security
10CS836/10IS836	Microcontroller-Based Systems

Elective V– Group E

10CS841/10IS841	Ad-hoc Networks
10CS842	Software Testing
10CS843	ARM Based System Design
10CS844/10IS844	Services Oriented Architecture
10CS845/10IS845	Clouds, Grids and Clusters
10CS846	Multi-core Architecture and Programming

NOTE: Students have to register for one Elective from each of the five Elective Group.

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SCHEME OF TEACHING AND EXAMINATION

B.E. INFORMATION SCIENCE AND ENGINEERING

(Common to CSE & ISE)

III SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10MAT31	Engineering Mathematics - III	Mathematics	04	-	03	25	100	125
2	10CS32	Electronic Circuits	CSE/ISE	04	-	03	25	100	125
3	10CS33	Logic Design	CSE/ISE	04	-	03	25	100	125
4	10CS34	Discrete Mathematical Structures	CSE/ISE	04	-	03	25	100	125
5	10CS35	Data Structures with C/C++	CSE/ISE	04	-	03	25	100	125
6	10CS36	Object Oriented Programming with C++	CSE/ISE	04	-	03	25	100	125
7	10CSL37	Data Structures with C/C++ Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL38	Electronic Circuits & Logic Design Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

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B.E. INFORMATION SCIENCE AND ENGINEERING
(Common to CSE & ISE)

IV SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10MAT41	Engineering Mathematics - IV	Maths	04	-	03	25	100	125
2	10CS42	Graph Theory and Combinatorics	CSE/ISE	04	-	03	25	100	125
3	10CS43	Design and Analysis of Algorithms	CSE/ISE	04	-	03	25	100	125
4	10CS44	Unix and Shell Programming	CSE/ISE	04	-	03	25	100	125
5	10CS45	Microprocessors	CSE/ISE	04	-	03	25	100	125
6	10CS46	Computer Organization	CSE/ISE	04	-	03	25	100	125
7	10CSL47	Design and Analysis of Algorithms Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL48	Microprocessors Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

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SCHEME OF TEACHING AND EXAMINATION
B.E. INFORMATION SCIENCE AND ENGINEERING

V SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10IS51	Software Engineering	CSE/ISE	04	-	03	25	100	125
2	10CS52	Systems Software	CSE/ISE	04	-	03	25	100	125
3	10CS53	Operating Systems	CSE/ISE	04	-	03	25	100	125
4	10CS54	Database Management Systems	CSE/ISE	04	-	03	25	100	125
5	10CS55	Computer Networks - I	CSE/ISE	04	-	03	25	100	125
6	10CS56	Formal Languages and Automata Theory	CSE/ISE	04	-	03	25	100	125
7	10CSL57	Database Applications Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL58	Systems Software & Operating Systems Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

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SCHEME OF TEACHING AND EXAMINATION
B.E. INFORMATION SCIENCE AND ENGINEERING

VI SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs /Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10AL61	Management and Entrepreneurship	CSE/ISE/MBA	04	-	03	25	100	125
2	10CS62	Unix System Programming	CSE/ISE	04	-	03	25	100	125
3	10IS63	File Structures	CSE/ISE	04	-	03	25	100	125
4	10CS64	Computer Networks - II	CSE/ISE	04	-	03	25	100	125
5	10IS65	Software Testing	CSE/ISE	04	-	03	25	100	125
6	10IS66x	Elective I (Group-A)	CSE/ISE	04	-	03	25	100	125
7	10ISL67	File Structures Laboratory	CSE/ISE	-	03	03	25	50	75
8	10ISL68	Software Testing Laboratory	CSE/ISE	-	03	03	25	50	75
Total				24	06	-	200	700	900

Elective I – Group A

10IS661/10CS661	*Operations Research*
10IS662/10CS63	*Compiler Design*
10IS663/10CS663	*Data Compression*
10IS664/10CS664	*Pattern Recognition*
10IS665/10CS65	*Computer Graphics and Visualization*
10IS666/10CS666	*Programming Languages*

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SCHEME OF TEACHING AND EXAMINATION
B.E. INFORMATION SCIENCE AND ENGINEERING

VII SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Exam	Total
1	10CS71	Object Oriented Modeling and Design	CSE/ISE	04	-	03	25	100	125
2	10IS72	Information Systems	CSE/ISE	04	-	03	25	100	125
3	10CS73	Programming the Web	CSE/ISE	04	-	03	25	100	125
4	10IS74/ 10CS755	Data Warehousing and Data Mining	CSE/ISE	04	-	03	25	100	125
5	10IS75x	Elective II (Group-B)	CSE/ISE	04	-	03	25	100	125
6	10IS76x	Elective III(Group-C)	CSE/ISE	04	-	03	25	100	125
7	10CSL77	Networks Laboratory	CSE/ISE	-	03	03	25	50	75
8	10CSL78	Web Programming Laboratory	CSE/ISE	-	03	03	25	50	75
		Total		24	06	-	200	700	900

Elective II – Group B

10IS751/10CS751 Advanced DBMS
10IS752/10CS72 Embedded Computing Systems
10IS753/10CS753 JAVA and J2EE
10IS754/10CS754 Multimedia Computing
10IS755 Advanced Software Engineering
10IS756/10CS756 Neural Networks

Elective III – Group C

10IS761/10CS761 C# Programming and .Net
10IS762/10CS762 Digital Image Processing
10IS763/10CS763 Game Theory
10IS764/10CS764 Artificial Intelligence
10IS765/10CS765 Storage Area Networks
10IS766/10CS766 Fuzzy Logic

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SCHEME OF TEACHING AND EXAMINATION
B.E. INFORMATION SCIENCE AND ENGINEERING

VIII SEMESTER

S. No.	Subject Code	Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration	Marks		
							IA	Exam	Total
1	10IS81	Software Architectures	CSE/ISE	04	-	03	25	100	125
2	10CS82	System Modeling and Simulation	CSE/ISE	04	-	03	25	100	125
3	10IS83x	Elective IV(Group-D)	CSE/ISE	04	-	03	25	100	125
4	10IS84x	Elective V(Group-E)	CSE/ISE	04	-	03	25	100	125
5	10IS85	Project Work	ISE		06	03	100	100	200
6	10IS86	Seminar	ISE		-	-	50	-	50
Total				16	06		250	500	750

Elective IV – Group D

10IS831/10CS831 Wireless Networks and Mobile Computing
10IS832/10CS832 Web 2.0 and Rich Internet Applications
10IS833 User Interface Design
10IS834/10CS834 Network Management Systems
10IS835/10CS835 Information and Network Security
10IS836/10CS836 Microcontroller-Based Systems

Elective V – Group E

10IS841/10CS841 Ad-hoc Networks
10IS842 Information Retrieval
10IS843 Supply Chain Management
10IS844/10CS844 Services Oriented Architecture
10IS845/10CS845 Clouds, Grids and Clusters
10IS846 Decision Support Systems

NOTE: Students have to register for one Elective from each of the five Elective Group

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SCHEME OF TEACHING AND EXAMINATION

B.E. ELECTRONICS & COMMUNICATION ENGINEERING

(Common to EC/TC/ML)

III SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching Hours /Week		Examination			
				Theory	Practical/ Drawing	Dura-tion	I.A. Marks	Theory/ Practical Marks	Total Marks
1	10MAT31	Engg. Mathematics - III	Mat	04		03	25	100	125
2	10ES32	Analog Electronic Ckts	@	04		03	25	100	125
3	10ES33	Logic Design	@	04		03	25	100	125
4	10ES34	Network Analysis	@	04		03	25	100	125
5	10IT35	Electronic Instrumentation	@	04		03	25	100	125
6	10ES36	Field Theory	@	04		03	25	100	125
7	10ESL37	Analog Electronics Lab	@		03	03	25	50	75
8	10ESL38	Logic Design Lab	@		03	03	25	50	75
TOTAL				**24**	**06**	**24**	**200**	**700**	**900**

Note : @ indicates concerned discipline. **ES (for theory) & ECL (for Lab)** in the subject code indicates that the subject is common to electrical and electronics stream consisting of **EE/EC/IT/TC/ML/BM branches** of engineering.

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SCHEME OF TEACHING AND EXAMINATION

B.E. ELECTRONICS & COMMUNICATION ENGINEERING

(Common to EC/TC/ML)

IV SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching Hours /Week		Examination			
				Theory	Practical/ Drawing	Dura-tion	I.A. Marks	Theory/ Practical Marks	Total Marks
1	10MAT 41	Engg. Mathematics – IV	Mat	04		03	25	100	125
2	10ES 42	Microcontrollers	@	04		03	25	100	125
3	10ES43	Control Systems	@	04		03	25	100	125
4	10EC 44	Signals & Systems	@	04		03	25	100	125
5	10EC45	Fundamentals of HDL	@	04		03	25	100	125
6	10EC46	Linear ICs & Applications	@	04		03	25	100	125
7	10ESL47	Microcontrollers Lab	@		03	03	25	50	75
8	10ECL48	HDL Lab	@		03	03	25	50	75
TOTAL				**24**	**06**	**24**	**200**	**700**	**900**

Note : @ indicates concerned discipline. **ES (for theory) & ECL (for Lab)** in the subject code indicates that the subject is common to electrical and electronics stream consisting of **EE/EC/IT/TC/ML/BM branches** of engineering

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SCHEME OF TEACHING AND EXAMINATION

B.E. ELECTRONICS & COMMUNICATION ENGINEERING

(Common to EC/TC)

V SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching Hours /Week		Examination			
				Theory	Practical/ Drawing	Dura-tion	I.A. Marks	Theory/ Practical Marks	Total Marks
1	10AL51	Management and Entrepreneurship	@	4	-	3	25	100	125
2	10EC52	Digital Signal Processing	EC	4	-	3	25	100	125
3	10EC53	Analog Communication	EC	4	-	3	25	100	125
4	10EC54	Microwaves and Radar	EC	4	-	3	25	100	125
5	10EC55	Information Theory & Coding	EC	4	-	3	25	100	125
6	10EC56	Fundamentals of CMOS VLSI	EC	4	-	3	25	100	125
7	10ECL57	DSP Lab	EC		3	3	25	50	75
8	10ECL58	Analog Communication Lab + LIC Lab	EC		3	3	25	50	75
TOTAL				**24**	**06**	**24**	**200**	**700**	**900**

@- Any Engineering department or department of Business study.

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SCHEME OF TEACHING AND EXAMINATION

B.E. ELECTRONICS & COMMUNICATION ENGINEERING

VI SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching Hours /Week		Examination			
				Theory	Practical/ Drawing	Dura-tion	I.A. Marks	Theory/ Practical Marks	Total Marks
1	10EC61	Digital Communication	EC	4	-	3	25	100	125
2	10EC62	Microprocessors	EC	4	-	3	25	100	125
3	10EC63	Microelectronics Circuits	EC	4	-	3	25	100	125
4	10EC64	Antennas and Propagation	EC	4	-	3	25	100	125
5	10EC65	Operating Systems	EC	4		3	25	100	125
6	10EC66x	**Elective-I (Group A)**	EC	4	-	3	25	100	125
7	10ECL67	Advanced Communication Lab	EC	-	3	3	25	50	75
8	10ECL68	Microprocessor Lab	EC	-	3	3	25	50	75
TOTAL				**24**	**06**	**24**	**200**	**700**	**900**

Elective – I (Group A)			
10EC661	Analog and Mixed Mode VLSI Design	10EC664	Low Power VLSI Design
10EC662	Satellite Communications	10EC665	Data Structure Using C++
10EC663	Random Process	10EC666	Digital System Design Using Verilog
		10EC667	Virtual Instrumentation

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SCHEME OF TEACHING AND EXAMINATION

B.E. ELECTRONICS & COMMUNICATION ENGINEERING

VII SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching Hours /Week		Examination			
				Theory	Practical/ Drawing	Dura-tion	I.A. Marks	Theory/ Practical Marks	Total Marks
1	10EC71	Computer Communication Networks	EC	4	-	3	25	100	125
2	10EC72	Optical Fiber Communicatio	EC	4	-	3	25	100	125
3	10EC73	Power Electronics	EC	4	-	3	25	100	125
4	10EC74	Embedded System Design	EC	4	-	3	25	100	125
5	10EC75x	**Elective-II (Group B)**	EC	4	-	3	25	100	125
6	10EC76x	**Elective-III (Group C)**	EC	4	-	3	25	100	125
7	10ECL77	VLSI Lab	EC	-	3	3	25	50	75
8	10ECL78	Power Electronics Lab	EC	-	3	3	25	50	75
TOTAL				**24**	**06**	**24**	**200**	**700**	**900**

Elective – II (Group B)		**Elective – III (Group C)**	
10EC751	DSP Algorithms & Architecture	10EC761	Programming in C++
10EC752	Micro and Smart Systems Technology	10EC762	Real Time Systems
10EC753	Artificial Neural Network	10EC763	Image Processing
10EC754	CAD for VLSI	10EC764	Radio Frequency Integrated Circuits
10EC755	Applied Embedded System Design*	10EC765	Wavelet Transforms
10EC756	Speech Processing	10EC766	Modeling and Simulation of Data Networks

NOTE: * 06EC755 Applied Embedded System Design has a LAB component (syllabus is different and in the Theory Examination, questions from Lab experiments will also be there.)

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SCHEME OF TEACHING AND EXAMINATION

B.E. ELECTRONICS & COMMUNICATION ENGINEERING

VIII SEMESTER

Sl. No	Subject Code	Title	Teaching Dept.	Teaching Hours /Week		Examination			
				Theory	Practical/ Drawing	Dura-tion	I.A. Marks	Theory/ Practical Marks	Total Marks
1	10EC81	Wireless Communication	EC	4	-	3	25	100	125
2	10EC82	Digital Switching Systems	EC	4	-	3	25	100	125
3	10EC83x	**Elective-IV (Group D)**	EC	4	-	3	25	100	125
4	10EC84x	**Elective-V (Group E)**	EC	4	-	3	25	100	125
5	10ECP85	Project Work	EC	-	6	3	100	100	200
6	10ECS86	Seminar	EC	-	3	-	50	-	50
TOTAL				**16**	**09**	**15**	**250**	**500**	**750**

Elective – IV (Group D)		**Elective – V (Group E)**	
10EC831	Distributed Systems	10EE841	Multimedia Communication
10EC832	Network Security	10EC842	Real Time Operating Systems
10EC833	Optical Networks	10EC843	GSM
10EC834	High Performance Computing Networks	10EC844	Ad-hoc Wireless Networks
10EC835	Internet Engineering	10EC845	Optical Computing

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(SCHEME OF TEACHING & EXAMINATION)

III SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

Subject Code	Title	Teaching Dept.	Teaching hours/week		Examination			
			Theory	Practical	Duration in hours	Marks		
						I. A	Theory/ Practical	Total Marks
10MAT31	Engineering Mathematics - III	Mat	04	-	03	25	100	125
10ES32	Analog Electronic Circuits	@	04	-	03	25	100	125
10ES33	Logic Design	@	04	-	03	25	100	125
10ES34	Network Analysis	@	04	-	03	25	100	125
10EE35	Electrical and Electronic Measurements And Instrumentation	E&EE	04	-	03	25	100	125
10EE36	Electric Power Generation	E&EE	04	-	03	25	100	125
10ESL37	Analog Electronics Lab	@	-	03	03	25	50	75
10ESL38	Logic Design Lab	@	-	03	03	25	50	75
		Total	24	06	24	200	700	900

Note : @ indicates concerned discipline. ES (for theory) & ESL (for Lab) in the subject code indicates that the subject is common to electrical and electronics stream consisting of EE/EC/IT/TC/ML/BM branches of engineering. EE indicates, subjects specific to E & EE branch only.

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(SCHEME OF TEACHING & EXAMINATION)
IV SEMESTER
ELECTRICAL AND ELECTRONICS ENGINEERING

Subject Code	Title	Teaching Dept.	Teaching hours/week		Examination			
			Theory	Practical	Duration in hours	Marks		
						I. A	Theory/ Practical	Total Marks
10MAT 41	Engineering Mathematics - IV	Mat	04	-	03	25	100	125
10ES42	Microcontrollers	@	04	-	03	25	100	125
10ES43	Control Systems	@	04	-	03	25	100	125
10EE44	Field Theory	E&EE	04	-	03	25	100	125
10EE45	Power Electronics	E&EE	04	-	03	25	100	125
10EE46	Transformers and Induction Machines	E&EE	04	-	03	25	100	125
10ESL47	Microcontrollers Lab	@	-	03	03	25	50	75
10EEL48	Power Electronics Lab	E&EE	-	03	03	25	50	75
		Total	24	06	24	200	700	900

Note : @ indicates concerned discipline. ES (for theory) & ESL (for Lab) in the subject code indicates that the subject is common to Electrical and Electronics stream consisting of EE/EC/IT/TC/ML/BM branches of engineering. EE indicates, subjects specific to E & EE branch only.

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(SCHEME OF TEACHING & EXAMINATION)
V SEMESTER
ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
01	10AL51	Management and Entrepreneurship	@	4	-	3	25	100	125
02	10EE52	Signals and Systems	E&EE	4	-	3	25	100	125
03	10EE53	Transmission and Distribution	E&EE	4	-	3	25	100	125
04	10EE54	D.C. Machines and Synchronous Machines	E&EE	4	-	3	25	100	125
05	10EE55	Modern Control theory	E&EE	4	-	3	25	100	125
06	10EE56	Linear IC's and Applications	E&EE	4	-	3	25	100	125
07	10EEL57	Measurements and Circuit Simulation Laboratory	E&EE	-	3	3	25	50	75
08	10EEL58	Transformers and Induction Machines Laboratory	E&EE	-	3	3	25	50	75
Total				24	06	24	200	700	900

@- Any Engineering department or department of Business study.

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(SCHEME OF TEACHING & EXAMINATION)
VI SEMESTER
ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks IA	Marks Theory / Practical	Marks Total
1	10EE61	Power System Analysis and Stability	E&EE	4	-	3	25	100	125
2	10EE62	Switchgear & Protection	E&EE	4	-	3	25	100	125
3	10EE63	Electrical Machine Design	E&EE	4	-	3	25	100	125
4	10EE64	Digital Signal Processing	E&EE	4	-	3	25	100	125
5	10EE65	CAED (Computer Aided Electrical Drawing)	E&EE	1	3	3	25	100	125
6	10EE66X	Elective-I (Group A)	E&EE	4	-	3	25	100	125
7	10EEL67	D.C. Machines and Synchronous Machines Laboratory	E&EE	-	3	3	25	50	75
8	10EEL68	Control Systems Laboratory	E&EE	-	3	3	25	50	75
Total				21	09	24	200	700	900

Elective-I (Group A)

10EE661- Operation Research
10EE662 - Advanced Power Electronics
10EE663 – Fuzzy Logic
10EE664 - Object Oriented Programming using C++
10EE665 - Embedded Systems
10EE666 – Electrical Engineering Materials.

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(SCHEME OF TEACHING & EXAMINATION)
VII SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

(SCHEME OF TEACHING & EXAMINATION)
VII SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10EE71	Computer Techniques in Power System Analysis	E&EE	4	-	3	25	100	125
2	10EE72	Electrical Power Utilization	E&EE	4	-	3	25	100	125
3	10EE73	High Voltage Engineering	E&EE	4	-	3	25	100	125
4	10EE74	Industrial Drives and Applications	E&EE	4	-	3	25	100	125
5	10EE75X	Elective-II (Group B)	E&EE	4	-	3	25	100	125
6	10EE76X	Elective-III (Group C)	E&EE	4	-	3	25	100	125
7	10EEL77	Relay and High Voltage Laboratory	E&EE	-	3	3	25	50	75
8	10EEL78	Power System Simulation Laboratory	E&EE	-	3	3	25	50	75
Total				24	06	24	200	700	900

Elective-II (Group B)
10EE751 - HVDC Transmission
10EE752 - Programmable Logic Controllers
10EE753 - Artificial Neural Network
10EE754 - Operating System
10EE755 - Digital System with VHDL
10EE756 -Testing and Commissioning of Electrical Equipment

Elective-III (Group C)
10EE761 - Power System Planning
10EE762 - Computer Control of Electrical Drives
10EE763 - Data Structure
10EE764 - VLSI Circuits and Design
10EE765 - Micro & Smart System Technology
10EE766 - Electromagnetic Compatibility

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(SCHEME OF TEACHING & EXAMINATION)
VIII SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching Hrs / Week		Examination			
				Theory	Practical	Duration (Hrs)	Marks		
							IA	Theory / Practical	Total
1	10EE81	Electrical Design, Estimating and Costing	E&EE	4	-	3	25	100	125
2	10EE82	Power System Operation and Control	E&EE	4	-	3	25	100	125
3	10EE83X	Elective-IV (Group D)	E&EE	4	-	3	25	100	125
4	10EE84X	Elective-V (Group E)	E&EE	4	-	3	25	100	125
5	10EEP85	Project Work	E&EE		6	3	100	100	200
6	10EES86	Seminar (on a latest topic relevant to the branch and independent of the project work)	E&EE	-	3	-	50	-	50
Total				16	09	15	250	500	750

Elective-IV (Group-D)

10EE831 - Reactive Power Management
10EE832 - Flexible A.C. Transmission Systems (FACTS)
10EE833- Advanced Instrumentation System
10EE834 - AI Applications to Power Systems
10EE835 - Data Base Management Systems (DBMS)
10EE836 - Renewable Energy Sources

Elective-V (Group-E)

10EE841 - Power Systems Dynamics and Stability
10EE842 - Energy Auditing & Demand Side management
10EE843 - Data communications and Networking
10EE844 - Electrical Distribution Systems
10EE845 - Insulation Engineering
10EE846 - Intellectual Property Rights
10EE847 - Electrical Power Quality

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