Bachelor of Technology (Common for All Branches)

SCHEME OF STUDIES/EXAMINATIONS

Semester – I

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	AS-101N	Applied Physics-I	4	1	0	5	75	25	0	100	3
2A	AS-103N	Applied Chemistry	3	1	0	4	75	25	0	100	3
2B	ME-101N	Manufacturing Technology and Processes	4	0	0	4	75	25	0	100	3
3	AS-105N	Applied Mathematics-I	4	1	0	5	75	25	0	100	3
4A	HS-101N	Technical Communication	3	1	0	4	75	25	0	100	3
4B	BT-101N	Fundamentals of Biotechnology	3	1	0	4	75	25	0	100	3
5A	ME-105N	Engg. Drawing and Graphics	1	0	3	4	75	25	0	100	3
5B	ECE-101N	Basics of Electronics Engg.	3	1	0	4	75	25	0	100	3
6A	EE-101N	Electrical Technology Fundamentals	4	1	0	5	75	25	0	100	3
6B	CSE-101N	Introduction to Computer Programming	3	1	0	4	75	25	0	100	3
7	AS-107N	Applied Physics Lab -I	0	0	2	2	0	20	30	50	3
8A	AS-109N	Applied Chemistry Lab	0	0	2	2	0	20	30	50	3
8B	ME-107N	Engg. Workshop	0	0	3	3	0	20	30	50	3
9A	EE-103N	Electrical Technology Lab	0	0	2	2	0	20	30	50	3
9B	CSE-103N	Computer Programming Lab	0	0	2	2	0	20	30	50	3
10B	ECE-103N	Basic Electronics Lab	0	0	2	2	0	20	30	50	3
		Total	**19/ 21**	**5/5**	**9/9**	**33/35**	**450**	**210/230**	**90/120**	**750A /800B**	

Bachelor of Technology (Common for All Branches)

SCHEME OF STUDIES/EXAMINATIONS

Semester – II

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	AS-102N	Applied Physics-II	4	1	0	5	75	25	0	100	3
2A	AS-103N	Applied Chemistry	3	1	0	4	75	25	0	100	3
2B	ME-101N	Manufacturing Technology and Processes	4	0	0	4	75	25	0	100	3
3	AS-104N	Applied Mathematics-II	4	1	0	5	75	25	0	100	3
4A	HS-101N	Technical Communication	3	1	0	4	75	25	0	100	3
4B	BT-101N	Fundamentals of Biotechnology	3	1	0	4	75	25	0	100	3
5A	ME-105N	Engg. Drawing and Graphics	1	0	3	4	75	25	0	100	3
5B	ECE-101N	Basics of Electronics Engg.	3	1	0	4	75	25	0	100	3
6A	EE-101N	Electrical Technology Fundamentals	4	1	0	5	75	25	0	100	3
6B	CSE-101N	Introduction to Computer Programming	3	1	0	4	75	25	0	100	3
7	AS-106N	Applied Physics Lab -II	0	0	2	2	0	20	30	50	3
8A	AS-109N	Applied Chemistry Lab	0	0	2	2	0	20	30	50	3
8B	ME-107N	Engg. Workshop	0	0	3	3	0	20	30	50	3
9A	EE-103N	Electrical Technology Lab	0	0	2	2	0	20	30	50	3
9B	CSE-103N	Computer Programming Lab	0	0	2	2	0	20	30	50	3
10B	ECE-103N	Basic Electronics Lab	0	0	2	2	0	20	30	50	3
		Total	**19/ 21**	**5/5**	**9/9**	**33/35**	**450**	**210/230**	**90/120**	**750A /800B**	

Bachelor of Technology (Electronics & Communication Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – III

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	AS-201N	Mathematics-III	3	1	0	4	75	25	0	100	3
2	ECE-201N	Signals & Systems	3	1	0	4	75	25	0	100	3
3	ECE-203N	Electronic Devices	3	1	0	4	75	25	0	100	3
4	ECE-205N	Network Analysis & Synthesis	3	1	0	4	75	25	0	100	3
5	ECE-207N	Digital Electronics	3	1	0	4	75	25	0	100	3
6	ECE-209N	Analog Communications	3	1	0	4	75	25	0	100	3
7	ECE-211N	Signals & Systems Lab	0	0	3	3	0	40	60	100	3
8	ECE-213N	Digital Electronics Lab	0	0	3	3	0	40	60	100	3
9	ECE-215N	Analog Communications Lab	0	0	3	3	0	40	60	100	3
		Total	**18**	**6**	**9**	**33**	**450**	**270**	**180**	**900**	
10	MPC-201N	Environmental Studies*	3	0	0	3	75	25	0	100	3

**MPC-201N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

Bachelor of Technology (Electronics & Communication Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – IV

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	HS-201N	Fundamentals of Management	3	0	0	3	75	25	0	100	3
2	CSE-203N	Data Structures & Algorithms	3	1	0	4	75	25	0	100	3
3	ECE-202N	Electronics Measurements & Instruments	3	1	0	4	75	25	0	100	3
4	ECE-204N	Electromagnetic Theory	3	1	0	4	75	25	0	100	3
5	ECE-206N	Analog Electronics	3	1	0	4	75	25	0	100	3
6	ECE-208N	Computer Architecture & Organisation	3	1	0	4	75	25	0	100	3
7	CSE-210N	Data Structures Lab	0	0	3	3	0	40	60	100	3
8	ECE-212N	Electronics Measurements & Instruments Lab	0	0	3	3	0	40	60	100	3
9	ECE-214N	Analog Electronics Lab	0	0	3	3	0	40	60	100	3
		Total	**18**	**5**	**9**	**32**	**450**	**270**	**180**	**900**	
10	MPC-202N	Energy Studies*	3	0	0	3	75	25	0	100	3

**MPC-202N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

***Note:** All the students have to undergo six weeks industrial training after IVth semester and it will be evaluated in Vth semester.*

Bachelor of Technology (Electronics & Communication Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – V

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ECE-301N	Microprocessors & Interfacing	3	1	0	4	75	25	0	100	3
2	AS-303N	Numerical Analysis	3	1	0	4	75	25	0	100	3
3	ECE-303N	Antenna & Wave Propagation	3	1	0	4	75	25	0	100	3
4	ECE-305N	VLSI Technology	3	1	0	4	75	25	0	100	3
5	ECE-307N	Control Systems	3	1	0	4	75	25	0	100	3
6	HS-309N	Business Intelligence & Entrepreneurship	3	0	0	3	75	25	0	100	3
7	ECE-309N	Microprocessors & Interfacing Lab	0	0	3	3	0	40	60	100	3
8	ECE-311N	Design Automation Lab	0	0	3	3	0	40	60	100	3
9	ECE-313N	Antenna & Wave Propagation Lab	0	0	3	3	0	40	60	100	3
10	ECE-315N	Training Viva*					0	100	0	100	
		Total	**18**	**5**	**9**	**32**	**450**	**370**	**180**	**1000**	

**The performance of the student will be evaluated after the presentation delivered and the report submitted by him/her related to Industrial training undertaken after IVth semester.*

Bachelor of Technology (Electronics & Communication Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VI

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ECE-302N	Digital Signal Processing	3	1	0	4	75	25	0	100	3
2	ECE-304N	Digital Design using Verilog	3	1	0	4	75	25	0	100	3
3	CSE-309N	Essentials of Information Technology	3	1	0	4	75	25	0	100	3
4	ECE-306N	Digital Communication	3	1	0	4	75	25	0	100	3
5	ECE-308N	Computer Communication Network	3	1	0	4	75	25	0	100	3
6	ECE-310N	Digital Signal Processing Lab	0	0	3	3	0	40	60	100	3
7	ECE-312N	Digital Design using Verilog Lab	0	0	3	3	0	40	60	100	3
8	ECE-314N	Digital Communication Lab	0	0	3	3	0	40	60	100	3
9	ECE-316N	Personality & Soft Skills Development *	3	0	0	3	0	200	0	200	3
		Total	**18**	**5**	**9**	**32**	**375**	**445**	**180**	**1000**	

**The student will be evaluated on the basis of technical seminar and technical group discussions of 100 marks each.*

***Note:** All the students have to undergo six weeks industrial training after VIth semester and it will be evaluated in VIIth semester.*

Bachelor of Technology (Electronics & Communication Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ECE-401N	Microcontroller & Embedded Systems Design	3	1	0	4	75	25	0	100	3
2	ECE-403N	Digital Image Processing	3	1	0	4	75	25	0	100	3
3	ECE-405N	Power Electronics	3	1	0	4	75	25	0	100	3
4		DEC-I*	3	1	0	4	75	25	0	100	3
5		DEC - II*	3	1	0	4	75	25	0	100	3
6	ECE-407N	Microcontroller & Embedded Systems Design Lab	0	0	3	3	0	40	60	100	3
7	ECE-409N	Digital Image Processing Lab	0	0	3	3	0	40	60	100	3
8	ECE-411N	Project -I**	0	0	8	3	0	100	100	200	3
9	ECE-413N	Training Viva***					0	100	0	100	
		Total	**15**	**5**	**14**	**34**	**375**	**405**	**220**	**1000**	

** The students should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	Course Title	Course No.	Course Title
ECE-415N	Advance Digital Communication	ECE-429N	Consumer Electronics
ECE-417N	Nano Electronics	ECE-431N	Robotics
ECE-419N	Optical Communications	ECE-433N	Non-Conventional Energy Resources
ECE-421N	Adaptive Signal Processing	ECE-435N	Microstrip line Analysis
ECE-423N	Satellite Communication	ECE-437N	Cloud Computing
ECE-425N	Digital VLSI Design	ECE-439N	Software Defined Radios
ECE-427N	Analog CMOS IC Design		

***The project should be initiated by the students in the beginning of VIIth semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

****The performance of the student will be evaluated after the presentation delivered and the report submitted by the student related to Industrial training undertaken after VIth semester.*

Bachelor of Technology (Electronics & Communication Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VIII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ECE-402N	Wireless & Mobile Communication	3	1	0	4	75	25	0	100	3
2	ECE-404N	Microwave Engineering	3	1	0	4	75	25	0	100	3
3		DEC-III*	3	1	0	4	75	25	0	100	3
4		DEC – IV*	3	1	0	4	75	25	0	100	3
5	ECE-406N	Project-II**	0	0	12	12	0	100	100	200	3
6	ECE-408N	Wireless & Mobile Communication Lab	0	0	3	3	0	40	60	100	3
7	ECE-410N	Microwave Engineering Lab	0	0	3	3	0	40	60	100	3
8	ECE-436N	General Fitness & Professional Aptitude***					0	100	100	200	3
		Total	**12**	**4**	**18**	**34**	**300**	**380**	**320**	**1000**	

**The student should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	Course Title	Course No.	Course Title
ECE-412N	DSP Processor	ECE-424N	Biomedical Signal Processing
ECE-414N	Mobile Communication Networks	ECE-426N	Multimedia Communications
ECE-416N	MEMS	ECE-428N	Mixed VLSI Design
ECE-418N	Transducers & its Applications	ECE-430N	Microstrip Antenna
ECE-420N	Radar Engineering	ECE-432N	Strategic Electronics
ECE-422N	High Frequency Circuit and Systems	ECE-434N	Cognitive Radios

***The project initiated by the students in VIIth semester will be continued in VIIIth semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

****ECE-436 is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

Bachelor of Technology (Computer Science & Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – III

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	HS-201N	Fundamentals of Management	3	0	0	3	75	25	0	100	3
2	CSE-201N	Discrete Structures	3	1	0	4	75	25	0	100	3
3	CSE-203N	Data Structures	3	1	0	4	75	25	0	100	3
4	CSE-205N	Database Management Systems	3	1	0	4	75	25	0	100	3
5	ECE-207N	Digital Electronics	3	1	0	4	75	25	0	100	3
6	CSE-209N	Programming Languages	3	1	0	4	75	25	0	100	3
7	CSE-211N	Data Structures Lab	0	0	3	3	0	40	60	100	3
8	ECE-213N	Digital Electronics Lab	0	0	3	3	0	40	60	100	3
9	CSE-215N	Data Base Management Systems Lab	0	0	3	3	0	40	60	100	3
		Total	**18**	**5**	**9**	**32**	**450**	**270**	**180**	**900**	
10	MPC-202N	Energy Studies*	3	0	0	3	75	25	0	100	3

**MPC-202N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

Bachelor of Technology (Computer Science & Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – IV

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	AS-201N	Mathematics-III	3	1	0	4	75	25	0	100	3
2	CSE-202N	Object Oriented Programming	3	1	0	4	75	25	0	100	3
3	CSE-204N	Internet Fundamental	3	0	0	3	75	25	0	100	3
4	CSE-206N	Digital Data Communication	3	1	0	4	75	25	0	100	3
5	ECE-301N	Microprocessor & Interfacing	3	1	0	4	75	25	0	100	3
6	CSE-210N	Operating System	3	1	0	4	75	25	0	100	3
7	CSE-212N	Object Oriented Programming Lab	0	0	3	3	0	40	60	100	3
8	ECE-311N	Microprocessor Lab	0	0	3	3	0	40	60	100	3
9	CSE-216N	Internet Lab	0	0	3	3	0	40	60	100	3
		Total	**18**	**5**	**9**	**32**	**450**	**270**	**180**	**900**	
10	MPC-201N	Environmental Studies*	3	0	0	3	75	25	0	100	3

**MPC-201N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

***Note:** All the students have to undergo 4 - 6 six weeks industrial training after IVth semester and it will be evaluated in Vth semester.*

Bachelor of Technology (Computer Science & Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – V

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	CSE-301N	Automata Theory	3	1	0	4	75	25	0	100	3
2	CSE-303N	Computer Networks	3	1	0	4	75	25	0	100	3
3	CSE-305N	Design and Analysis of Algorithms	3	1	0	4	75	25	0	100	3
4	CSE-307N	Computer Organisation and Architecture	3	1	0	4	75	25	0	100	3
5	CSE-309N	Essential of Information Technology	3	1	0	4	75	25	0	100	3
6	CSE-311N	Computer Network Lab	0	0	3	3	0	40	60	100	3
7	CSE-313N	Design and Analysis of Algorithms Lab	0	0	3	3	0	40	60	100	3
8	CSE-315N	Advance of Information Technology Lab	0	0	3	3	0	40	60	100	3
9	CSE-317N	Seminar	0	0	2	2	0	40	60	100	3
10	CSE-319N	Technical Communication and Soft Skills Lab	0	0	2	2	0	40	60	100	3
11	CSE-321N	Industrial Training (Viva-Voce)*						40	60	100	
		Total	**15**	**5**	**13**	**33**	**375**	**365**	**360**	**1100**	

**The performance of the student will be evaluated after the presentation delivered and the report submitted by him/her related to Industrial training undertaken after IVth semester.*

Bachelor of Technology (Computer Science & Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VI

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	CSE-302N	Compiler Design	3	1	0	4	75	25	0	100	3
2	CSE-304N	Simulation & Modellinig	3	1	0	4	75	25	0	100	3
3	CSE-306N	Mobile Computing	3	1	0	4	75	25	0	100	3
4	CSE-308N	Computer Graphics and Animation	3	1	0	4	75	25	0	100	3
5	CSE-310N	Software Engineering	3	1	0	4	75	25	0	100	3
6	CSE-312N	Computer Graphics Lab	0	0	3	3	0	40	60	100	3
7	CSE-314N	Simulation Lab	0	0	3	3	0	40	60	100	3
8	CSE-316N	Software Engineering Lab	0	0	3	3	0	40	60	100	3
		Total	**15**	**5**	**9**	**29**	**375**	**245**	**180**	**800**	

Note: *All the students have to undergo 4-6 weeks industrial training after VIth semester and it will be evaluated in VIIth semester.*

Bachelor of Technology (Computer Science & Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	CSE-401N	Unix & Linux Programming	4	0	0	4	75	25	0	100	3
2	CSE-403N	Web Technology	4	0	0	4	75	25	0	100	3
3	HS-401N	Entrepreneurship	4	0	0	4	75	25	0	100	3
4		DEC-I*	3	0	0	3	75	25	0	100	3
5		DEC-II*	3	0	0	3	75	25	0	100	3
6	CSE-405N	Web Technology Lab	0	0	2	2	0	40	60	100	3
7	CSE-407N	Project-I**	0	0	8	8	0	100	100	200	3
8	CSE-409N	Computer Hardware & Troubleshooting Lab	0	0	2	2	0	40	60	100	3
9	CSE-411N	Seminar	0	0	2	2	0	100	0	100	
10	CSE-413N	Industrial Training (Viva-Voce)***						40	60	100	
		Total	**18**	**0**	**14**	**32**	**375**	**445**	**280**	**1100**	

** The students should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	DEC-I	Course No.	DEC-II
CSE-415N	Object Oriented Software Engineering	CSE-421N	Agile Software Engineering
CSE-417N	Big Data and Analytics	CSE-423N	Parallel Computing
CSE-419N	Cryptography & Information Security	CSE-425N	Expert Systems

***The project should be initiated by the students in the beginning of VIIth semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

****The performance of the student will be evaluated after the presentation delivered and the report submitted by the student related to Industrial training undertaken after VIth semester.*

Bachelor of Technology (Computer Science & Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VIII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	CSE-402N	Neural Networks & Fuzzy Logic	4	0	0	4	75	25	0	100	3
2		DEC-III*	4	0	0	4	75	25	0	100	3
3		DEC-IV*	4	0	0	4	75	25	0	100	3
4	CSE-404N	Mobile Apps Development	4	0	0	4	75	25	0	100	3
5	CSE-406N	Mobile Apps Development Lab	0	0	3	3	0	40	60	100	3
6	CSE-408N	Project-II**	0	0	16	16	0	100	100	200	3
		Total	**16**	**0**	**19**	**35**	**300**	**240**	**160**	**700**	
7	CSE-410N	General Fitness & Professional Aptitude***						100		100	

**The student should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	DEC-III	Course No.	DEC-IV
CSE-412N	Software Project Management	CSE-418N	Cloud Computing
CSE-414N	Cycber Security	CSE-420N	Graph Theory
CSE-416N	Data Mining	CSE-422N	Natural Language Programming

***The project initiated by the students in VIIth semester will be continued in VIIIth semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

****CSE-410 is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

Bachelor of Technology (Mechanical Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – III

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	AS-201N/ HS-201N	Mathematics –III/ Fundamentals of Management	3	1	0	4	75	25	0	100	3
2	ME-201N	Basic Thermodynamics	3	1	0	4	75	25	0	100	3
3	ME-203N	Mechanics of Solid –I	3	1	0	4	75	25	0	100	3
4	ME-205N	Machine Drawing	2	0	3	5	75	25	0	100	3
5	ME-207N	Kinematics of Machines	3	1	0	4	75	25	0	100	3
6	ME-209N	Material Science	4	0	0	4	75	25	0	100	3
7	ME-211N	Kinematics of Machine Lab	0	0	2	2	0	40	60	100	3
8	ME-213N	Material Science Lab	0	0	2	2	0	40	60	100	3
9	ME-215N	Mechanics of Solid Lab	0	0	2	2	0	40	60	100	3
		Total	**18**	**4**	**9**	**31**	**450**	**270**	**180**	**900**	
10	MPC-201N	Environmental Studies*	3	0	0	3	75	25	0	100	3

**MPC-201N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

Bachelor of Technology (Mechanical Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – IV

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	AS-201N/ HS-201N	Mathematics –III/ Fundamentals of Management	3	1	0	4	75	25	0	100	3
2	ME-202N	Production Technology-I	4	0	0	4	75	25	0	100	3
3	ME-204N	Steam Generation & Power	3	1	0	4	75	25	0	100	3
4	ME-206N	Mechanics of Solid-II	3	1	0	4	75	25	0	100	3
5	ME-208N	Fluid Mechanics	4	1	0	5	75	25	0	100	3
6	ME-210N	Dynamics of Machine	3	1	0	4	75	25	0	100	3
7	ME-214N	Fluid Mechanics Lab	0	0	2	2	0	40	60	100	3
8	ME-216N	Dynamics of Machine Lab	0	0	2	2	0	40	60	100	3
9	ME-218N	Steam Generation & Power Lab	0	0	2	2	0	40	60	100	3
10	ME-220N	Production Technology Lab	0	0	3	3	0	40	60	100	
		Total	**20**	**5**	**9**	**34**	**450**	**310**	**240**	**1000**	
10	MPC-202N	Energy Studies*	3	0	0	3	75	25	0	100	3

**MPC-202N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

***Note:** All the students have to undergo six weeks industrial training after IVth semester and it will be evaluated in Vth semester.*

Bachelor of Technology (Mechanical Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – V

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ME-301N	I.C. Engine & Gas Turbine	3	1	0	4	75	25	0	100	3
2	ME-303N	Fluid Machines	3	1	0	4	75	25	0	100	3
3	ME-305N	Heat Transfer	3	1	0	4	75	25	0	100	3
4	ME-307N	Industrial Engineering	3	1	0	4	75	25	0	100	3
5	ME-309N	Machine Design-I	2	0	4	6	75	25	0	100	3
6	ME-311N	Production Technology-II	4	0	0	4	75	25	0	100	3
7	ME-313N	I.C. Engine Lab	0	0	2	2	0	40	60	100	3
8	ME-315N	Fluid Machines Lab	0	0	2	2	0	40	60	100	3
9	ME-317N	Heat Transfer Lab	0	0	2	2	0	40	60	100	3
10	ME-319N	Industrial Training (Viva-Voce)*	0	0	0	0	0	40	60	100	3
		Total	**18**	**4**	**10**	**32**	**450**	**310**	**240**	**1000**	

**The performance of the student will be evaluated after the presentation delivered and the report submitted by him/her related to Industrial training undertaken after IVth semester.*

Bachelor of Technology (Mechanical Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VI

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ME-302N	Refrigeration and Air Conditioning	3	1	0	4	75	25	0	100	3
2	ME-304N	Tribology & Mechanical Vibration	3	1	0	4	75	25	0	100	3
3	ME-306N	Operation Research	3	1	0	4	75	25	0	100	3
4	CSE-209N	Essentials of IT	3	1	0	4	75	25	0	100	3
5	ME-308N	Computer Aided Design and Manufacturing	4	0	0	4	75	25	0	100	3
6	ME-310N	Machine Design-II	2	0	4	6	75	25	0	100	3
7	ME-312N	Refrigeration and Air Conditioning Lab	0	0	2	2	0	40	60	100	3
8	ME-314N	Tribology & Mechanical Vibration Lab	0	0	2	2	0	40	60	100	3
9	ME-316N	Computer Aided Design and Manufacturing Lab	0	0	2	2	0	40	60	100	3
		Total	**18**	**4**	**10**	**32**	**450**	**270**	**180**	**900**	

Note: *All the students have to undergo six weeks industrial training after VIth semester and it will be evaluated in VIIth semester.*

Bachelor of Technology (Mechanical Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ME-401N	Measurement and Control	4	0	0	4	75	25	0	100	3
2	ME-403N	Mechatronics	4	0	0	4	75	25	0	100	3
3	HS-301N	Entrepreneurship	3	0	0	3	75	25	0	100	3
4		DEC – I*	4	0	0	4	75	25	0	100	3
5		DEC –II*	3	0	0	3	75	25	0	100	3
6	ME-405N	Measurement & Control Lab	0	0	2	2	0	40	60	100	3
7	ME-407N	Mechatronics Lab	0	0	2	2	0	40	60	100	3
8	ME-409N	Project-I**	0	0	8	8	0	100	100	200	
9	ME-411N	Industrial Training (Viva-Voce)***	0	0	0	0	0	40	60	100	
10	ME-413N	Seminar-I	0	0	2	2		50	50	100	
		Total	**18**	**0**	**16**	**32**	**375**	**395**	**330**	**1100**	

** The students should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	DEC-I	Course No.	DEC-II
ME-413N	Non-Conventional Machining	ME-425N	Finite Element Methods in Engineering
ME-415N	Soft Computing Techniques	ME-427N	Advanced Manufacturing Technology
ME-417N	Non-Destructive Evaluation & Testing	ME-429N	Robotics: Mechanics and Control
ME-419N	Design and Optimization	ME-431N	Simulation of Mechanical Systems
ME-421N	Computational Fluid Dynamics	ME-433N	Control Engineering
ME-423N	Fundamental of Gas Dynamics	ME-435N	Environmental Pollution and Abatement

***The project should be initiated by the students in the beginning of VII^{h} semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

****The performance of the student will be evaluated after the presentation delivered and the report submitted by the student related to Industrial training undertaken after VIth semester.*

Bachelor of Technology (Mechanical Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VIII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	ME-402N	Automobile Engineering	4	0	0	4	75	25	0	100	3
2		DEC-III*	4	0	0	4	75	25	0	100	3
3		DEC-IV*	4	0	0	4	75	25	0	100	3
4	ME-404N	Power Plant Engineering	4	0	0	4	75	25	0	100	3
5	ME-406N	Quality Assurance & Reliability	4	0	0	4	75	25	0	100	3
6	ME-408N	Automobile Engineering Lab	0	0	2	2	0	40	60	100	3
7	ME-410N	Project-II**	0	0	10	10	0	100	100	200	
8	ME-412N	Seminar	0	0	2	2	0	100	0	100	
		Total	**20**	**0**	**14**	**34**	**375**	**365**	**160**	**900**	

**The student should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	DEC-III	Course No.	DEC-IV
ME-414N	Smart Materials Structures & Devices	ME-426N	Manufacturing Management
ME-416N	Lubrication Technology	ME-428N	Design of Pressure Vessels and Piping
ME-418N	Energy Management	ME-430N	Concurrent Engineering
ME-420N	Waste Heat Recovery System	ME-432N	Industrial Combustion
ME-422N	Foundary Engineering	ME-434N	Metal Forming and Finishing
ME-424N	Ergonomics in Design	ME-436N	Air Craft and Rocket Propulsion

********The project should be initiated by the students in the beginning of VIIIth semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

Note: *Project-II should not be related to Project-I unless it involves large amount of work, time and effort.*

Bachelor of Technology (Biotechnology Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – III

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	BT-201N	Cell Biology	3	1	0	4	75	25	0	100	3
2	BT-203N	Microbiology	3	1	0	4	75	25	0	100	3
3	BT-205N	Biochemistry	3	1	0	4	75	25	0	100	3
4	BT-207N	Genetics	3	1	0	4	75	25	0	100	3
5	HS-201N	Fundamentals of Management	3	0	0	3	75	25	0	100	3
6	BT-209N	Cell Biology & Genetics Lab	0	0	3	3	0	40	60	100	3
7	BT-211N	Microbiology Lab	0	0	3	3	0	40	60	100	3
8	BT-213N	Biochemistry Lab	0	0	3	3	0	40	60	100	3
		Total	**15**	**4**	**9**	**28**	**375**	**245**	**180**	**800**	
9	MPC-202N	Energy Studies*	3	0	0	3	75	25	0	100	3

**MPC-202N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

Bachelor of Technology (Biotechnology Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – IV

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	BT-202N	Molecular Biology	3	1	0	4	75	25	0	100	3
2	BT-204N	Immunology	3	1	0	4	75	25	0	100	3
3	BT-206N	Bio-analytical Techniques	3	1	0	4	75	25	0	100	3
4	BT-208N	Industrial Microbiology & Enzyme Technology	3	1	0	4	75	25	0	100	3
5	BT-210N	Organic Chemistry	3	1	0	4	75	25	0	100	3
6	BT-212N	Molecular Biology Lab	0	0	3	3	0	40	60	100	3
7	BT-214N	Immunology Lab	0	0	3	3	0	40	60	100	3
8	BT-216N	Bio-analytical Techniques Lab	0	0	3	3	0	40	60	100	3
9	BT-218N	Industrial Microbiology Lab	0	0	3	3	0	40	60	100	3
		Total	**15**	**5**	**12**	**32**	**375**	**285**	**240**	**900**	
10	MPC-201N	Environmental Studies*	3	0	0	3	75	25	0	100	3

**MPC-201N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*

***Note:** All the students have to undergo 4-6 weeks industrial training after IVth semester and it will be evaluated in Vth semester.*

Bachelor of Technology (Biotechnology Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – V

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	BT-301N	Recombinant DNA Technology	3	1	0	4	75	25	0	100	3
2	BT-303N	Bioreactor Analysis & Design	3	1	0	4	75	25	0	100	3
3	BT-305N	Bioprocess Engineering	3	1	0	4	75	25	0	100	3
4	BT-307N	Downstream Processing	3	1	0	4	75	25	0	100	3
5	BT-309N	Molecular Diagnostic Techniques & Healthcare Biotechnology	3	1	0	4	75	25	0	100	3
6	CSE-309N	Essentials of Information Technology	3	1	0	4	75	25	0	100	3
7	BT-313N	Recombinant DNA Technology Lab	0	0	3	3	0	40	60	100	3
8	BT-315N	Fermentation & DSP Lab	0	0	3	3	0	40	60	100	3
9	BT-317N	Diagnostic Techniques Lab	0	0	3	3	0	40	60	100	3
10	CSE-315N	Information Technology Lab	0	0	2	2	0	40	60	100	3
11	BT-319N	Industrial Training (Viva-Voce)*	0	0	2	2	0	40	60	100	
		Total	**18**	**6**	**13**	**37**	**450**	**350**	**300**	**1100**	

**The performance of the student will be evaluated after the presentation delivered and the report submitted by him/her related to Industrial training undertaken after IVth semester.*

Bachelor of Technology (Biotechnology Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VI

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	BT-302N	Microbial Biotechnology	3	1	0	4	75	25	0	100	3
2	BT-304N	Plant Biotechnology	3	1	0	4	75	25	0	100	3
3	BT-306N	Animal Biotechnology	3	1	0	4	75	25	0	100	3
4	BT-308N	Principles of Biostatistics	3	1	0	4	75	25	0	100	3
5	BT-310N	Environmental Biotechnology	3	1	0	4	75	25	0	100	3
6	BT-312N	Food Biotechnology	3	0	0	3	75	25	0	100	3
7	BT-314N	Animal Cell Culture Lab	0	0	3	3	0	40	60	100	3
8	BT-316N	Plant Cell Culture Lab	0	0	3	3	0	40	60	100	3
9	BT-318N	Food & Environmental Biotechnology Lab	0	0	3	3	0	40	60	100	3
		Total	**18**	**5**	**9**	**32**	**450**	**270**	**180**	**900**	

Note: *All the students have to undergo 4-6 weeks industrial training after VIth semester and it will be evaluated in VIIth semester.*

Bachelor of Technology (Biotechnology Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	BT-401N	Bioinformatics	3	1	0	4	75	25	0	100	3
2	BT-403N	Pharmaceutical Biotechnology	3	1	0	4	75	25	0	100	3
3		DEC -I*	3	1	0	4	75	25	0	100	3
4		DEC -II*	3	1	0	4	75	25	0	100	3
5	HS-401N	Entrepreneurship	3	0	0	3	75	25	0	100	3
6	BT-405N	Bioinformatics Lab	0	0	4	4	0	40	60	200	3
7	BT-407N	Seminar	0	0	2	2	0	100	0	100	
8	BT-409N	Project-I**	0	0	8	8	0	100	100	200	
9	BT-411N	Industrial Training (Viva-Voce)***	0	0	2	2		40	60	100	
		Total	**15**	**4**	**16**	**35**	**375**	**405**	**220**	**1000**	

** The students should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	**DEC-I**	**Course No.**	**DEC-II**
BT-413N	Biosensor and Bioinstrumentation	BT-421N	Advanced Management Information System and Information Technology
BT-415N	Biochips and Microarray Technology	BT-423N	Behavioural Neuroscience
BT-417N	Nano-Biotechnology	BT-425N	Herbal Drug Technology
BT-419N	Stem Cell Technology	BT-427N	Human Genetics and Human Genome

***The project should be initiated by the students in the beginning of VIIth semester and will be evaluated at the end of the semester on the basis of a presentation and report.*

****The performance of the student will be evaluated after the presentation delivered and the report submitted by the student related to Industrial training undertaken after VIth semester.*

Bachelor of Technology (Biotechnology Engineering)

SCHEME OF STUDIES/EXAMINATIONS

Semester – VIII

S. No.	Course No.	Course Title	Teaching Schedule				Allotment of Marks				Duration of Exam (Hrs.)
			L	T	P	Hours/ Week	Theory	Sessional	Practical	Total	
1	BT-402N	Biocatalysis & Biotransformation	3	1	0	4	75	25	0	100	3
2		DEC -III*	3	1	0	4	75	25	0	100	3
3		DEC -IV*	3	1	0	4	75	25	0	100	3
4	BT-404N	Bioethics, IPR and Biosafety	3	0	0	3	75	25	0	100	3
5	BT-406N	Professional Practice & Communication Skills Lab	0	0	2	2	0	40	60	100	3
6	BT-408N	Advanced Techniques in Biotechnology Lab	0	0	2	2	0	40	60	100	3
7	BT-410N	Project-II	0	0	16	16	0	100	100	200	3
		Total	**12**	**3**	**20**	**35**	**300**	**280**	**220**	**800**	
8	BT-412N	General Proficiency**						100	0	100	0

**The student should select two Departmental Elective Courses (DEC) from the following list.*

Course No.	**DEC-III**	**Course No.**	**DEC-IV**
BT-414N	Virology	BT-422N	Developmental Biology
BT-416N	Molecular Modeling and Drug Design	BT-424N	Protein Engineering
BT-418N	Cancer Biology	BT-426N	Biomaterial Technology
BT-420N	Plant Physiology and Biotechnology	BT-428N	Food Process Engineering

***BT-412N is a mandatory course and student has to get passing marks in order to qualify for the award of degree but its marks will not be added in the grand total.*