Regulation -23

(Under New Education Policy)

Academic Course Credit System and Evaluation Scheme

B.Tech. Electrical Engineering Program

(Second Year)

DEPARTMENT OF ELECTRICAL ENGINEERING

Sardar Patel College of Engineering, Mumbai

Courses Offered to Second Year B.Tech. in Electrical Engineering (SEMESTER-III) under Regulation-23

Sr. No.	Course Name	Code	Course Plan per Week (Hrs)			Credits	In semester Evaluation (Points)			End Semester Evaluation (Points)		End semester weightage	Total Points
			L	P	T		T-I	T-II	IE	Points	Time (Hrs)		
Core Courses													
1	Laplace Transform, Vector calculus & Linear Algebra	BS-BTE301	2	0	1	3	15	15	20	100	3	50%	100
2	Analog Circuits	PC-BTE301	3	0	0	3	15	15	20	100	3	50%	100
3	Electrical Networks	PC-BTE302	2	0	0	2	15	15	20	100	3	50%	100
4	Digital Electronics	PC-BTE303	3	0	0	3	15	15	20	100	3	50%	100
5	Electromagnetic Field and Waves	PC-BTE304	3	0	0	3	15	15	20	100	3	50%	100
Laboratory Courses													
6	Analog Circuits Lab	PC-BTE351	0	2	0	1	0	0	25	25	0	100%	50
7	Electrical Networks Lab	PC-BTE352	0	2	0	1	0	0	25	25	0	100%	50
8	Digital Electronics Lab	PC-BTE353	0	2	0	1	0	0	25	25	0	100%	50
9	Electromagnetic Field and Waves Lab	PC-BTE354	0	2	0	1	0	0	25	25	0	100%	50
Value Education Course													
10	Environmental Science and Sustainability	VE-BTE001	2	0	0	2	15	15	20	50		100%	100
	TOTAL					**20**							

L: Lecture, P: Practical, T Tutorial, T1: In semester test 1, T2: In semester test 2, IE: Internal Evaluation

Courses Offered to Second Year B.Tech. in Electrical Engineering (SEMESTER-IV) under Regulation-23													
Sr. No.	**Course Name**	**Code**	**Course Plan per Week (Hrs)**			**Credits**	**In semester Evaluation (Points)**			**End Semester Evaluation (Points)**		**End semester weightage (%)**	**Total Points**
			L	**P**	**T**		**T-I**	**T-II**	**IE**	**Points**	**Time (Hrs)**		
Core Courses													
1	Transforms, Statistics and Probability	BS-BTE401	2	0	1	3	15	15	20	100	3	50%	100
2	Power Generation, Transmission and Distribution	PC-BTE401	3	0	1	4	15	15	20	100	3	50%	100
3	Measurement & Instrumentation	PC-BTE402	3	0	0	3	15	15	20	100	3	50%	100
4	Electrical Machines - I	PC-BTE403	3	0	0	3	15	15	20	100	3	50%	100
5	Microprocessor and Microcontroller	PC-BTE404	3	0	0	3	15	15	20	100	3	50%	100
6	Signals and Systems	PC-BTE405	3	0	0	3	15	15	20	100	3	50%	100
Laboratory Courses													
7	Measurement & Instrumentation Lab	PC-BTE452	0	2	0	1	0	0	25	25	0	100%	50
8	Electrical Machines - I Lab	PC-BTE453	0	2	0	1	0	0	25	25	0	100%	50
9	Microprocessor and Microcontroller Lab	PC-BTE454	0	2	0	1	0	0	25	25	0	100%	50
Minor Course													
10	Minor-1	MI-BT0x1	2	0	0	2	15	15	20	100	3	50%	100
	TOTAL					**24**							

L: Lecture, P: Practical, T Tutorial, T1: In semester test 1, T2: In semester test 2, IE: Internal Evaluation

.

Evaluation for R23 : S.Y. B. Tech

1. T1, T2: The courses under the category "Theory courses", the evaluation is based on Test of 15 points each for one hour duration. Tentatively the first two modules of the course content will be covered in T1 and third and fourth modules of the course content will be covered in T2. Any change in the same will be informed by the course instructor.

   The courses under the category "Skill Enhancement", "Value Education", the evaluation is based on activity (Presentation, Test, Mini project, Field project, Practical Examination) of 15 points each.
2. IE: Internal Evaluation will be carried out by the course instructor for 20 points. It is the continuous evaluation throughout the semester. The evaluation will be based on minimum three of the following activities decided by course instructor. The maximum points that can be assigned to one activity will be 07. The course instructor needs to inform the students and head of the department about the activities those will be considered for IE and the points assigned to them in first week of semester. The course instructor will submit the internal evaluation points (out of 20 with activity wise break up) to examination section before the beginning of End Semester examination.

   List of Activities: 1. Class Involvement 2. Assignments 3. Problem Solving 4. Mini project 5. Quizzes 6. Presentation 7. Oral

3. End semester evaluation: The courses under the category "Theory courses", the evaluation is based on End semester examination of 100 points. **The end semester examination will cover all the modules of the course content.**

   The courses under the category "Skill Enhancement", "Value Education", the evaluation is based on activity (Presentation, Test, Mini project, Field project, Practical Examination) of 50/100 points
4. The evaluation of the laboratory courses include internal evaluation IE of 25 points and End semester evaluation of 25 points. The internal evaluation is based on [10 points: Laboratory Attendance, 15 points: Laboratory work] and End semester evaluation is based on [25 points: Quizes/ Presentation/ Practical Examination/ Mini project/Oral may be any two activities]
5. The co-curricular course credits in semester VIII can be earned through participation in various activities during his/ her graduation. The co-curricular course credits are not considered for CPI calculation.

Note: Refer Academic and Examination rules and regulations for further details.

Exit Courses under B.Tech. in Electrical Engineering Program (Regulation-23) **Total 6 Credits to be completed** **Any two courses from the following List can be selected.**		
Sr. No.	**Course Name**	**Credits**
First Year of Electrical Engineering		
1	Domestic and Panel wiring	3
2	Solar System installation and maintenance	3
3	Home Automation	3
4	Internship in Electrical industry	3

Second Year of Electrical Engineering		
1	Domestic and Panel wiring	3
2	Solar System installation and maintenance	3
3	Home Automation	3
4	Power System Transmission and Distribution operation and maintenance	3
5	Cable Jointing	3
3	Internship in Electrical industry	3