

Code: 20EE2501A

III B.Tech - I Semester – Regular Examinations - DECEMBER 2022**ELECTRICAL SAFETY**
(Common to ALL Branches)

Duration: 3 hours

Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.

2. All parts of Question must be answered in one place.

BL – Blooms Level

CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	State the necessity to follow Indian Electricity (IE) rules.	L2	CO1	7 M
	b)	Illustrate about objectives of safety and security measures briefly.	L3	CO4	7 M
OR					
2	a)	Explain safety precautions against contact shocks and flash shocks.	L2	CO1	7 M
	b)	Discuss about possibilities of getting electrical shock and its severity.	L2	CO4	7 M
UNIT-II					
3	a)	What precautions will you observe while installing a pump in a well from the electricity point of view?	L2	CO1	7 M
	b)	Illustrate the electrical safety requirements in the wiring of a domestic house.	L3	CO2	7 M

OR					
4	a)	Explain in detail the various safety measures adopted in Multi-storeyed buildings.	L2	CO2	7 M
	b)	Illustrate the safety requirement for agricultural installations.	L3	CO2	7 M
UNIT-III					
5	a)	Explain field quality and safety during erection of an electrical plant.	L2	CO3	7 M
	b)	Explain the significance of safety documentation.	L4	CO4	7 M
OR					
6	a)	Describe about safety clearance notice before energizing a plant for first time.	L2	CO3	7 M
	b)	Analyze preliminary preparations taken before commencing installations.	L4	CO3	7 M
UNIT-IV					
7	a)	Illustrate the classification of various hazardous zones.	L3	CO4	7 M
	b)	Explain the importance of earthing of system neutral.	L2	CO4	7 M
OR					
8	a)	Explain the equipment for hazardous areas.	L2	CO5	7 M
	b)	Illustrate the functional requirements of electrical apparatus for hazardous locations.	L3	CO5	7 M

UNIT-V

9	a)	Explain different types to prevent the fire.	L2	CO1	7 M
	b)	Distinguish the use of fire extinguishing media and fire extinguishers.	L2	CO5	7 M
OR					
10	a)	Discuss preventive actions against the prevention of fire in electrical system.	L2	CO1	7 M
	b)	Discuss about the fundamentals of fire.	L2	CO5	7 M