

Code: 19ES5501B

**III B.Tech - I Semester – Regular Examinations
JANUARY 2022**

**ELECTRICAL SAFETY
(COMMON TO EEE, ME & ECE)**

Duration: 3 hours

Max. Marks: 70

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- Note: 1. This question paper contains two Parts A and B.
2. Part-A contains 5 short answer questions. Each Question carries 2 Marks.
3. Part-B contains 5 essay questions with an internal choice from each unit. Each question carries 12 marks.
4. All parts of Question paper must be answered in one place
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PART – A

1. a) What do you mean by primary shock.
b) Explain standby generating set.
c) Explain the safety precautions in electrical equipment installation.
d) What are hazardous zones in residential area.
e) Explain importance of fire extinguishers.

PART – B

UNIT – I

2. Write a brief note on human factors in electrical safety 12 M

OR

3. Define Electric shock and explain medical analysis for the electric shock. 12 M

UNIT – II

4. Write a note on Do's and Don'ts for safety in the use of domestic electrical appliances. 12 M

OR

5. Discuss the safety requirement for agricultural installations. 12 M

UNIT-III

6. Explain Safety tags locks and locking devices. 12 M

OR

7. Write short notes on safety Audit. 12 M

UNIT – IV

8. Write short notes on 12 M
- i) Hazards in electricity.
 - ii) Protective clothing.
 - iii) Head and eye protection.

OR

9. Discuss about classification of equipment/enclosure for hazardous locations. 12 M

UNIT – V

10. What are CO₂ and Halogen gas schemes in safety. 12 M

OR

11. Illustrate the necessity of fire extinguishing system in work area. 12 M