

- Q.26 Write the components of overhead transmission line?
  - Q.27 Explain Indian electricity rules for line crossing over railways and bridges?
  - Q.28 Explain the process of locating a fault using megger.
  - Q.29 Explain the maintenance of motors in detail.
  - Q.30 How you can improve the power factor?
  - Q.31 Write the various parameters in handling of tools.
  - Q.32 Write about different methods of fault localization in cables.
  - Q.33 Write a note earthing system for substation?
  - Q.34 Why electric fuses are always connected in series in an electrical circuit?
  - Q.35 Write the procedure for testing insulation resistance to earth in domestic installation. What is the value of insulation resistance?

## **Section-D**

**Note:** Long answer Questions. Attempt any two Questions out of three Questions.  $(2 \times 10 = 20)$

- Q.36 Explain the Electricity rules of IS standards for prevention of accidents.

Q.37 Discuss in detail the insulation resistance measurements techniques.

Q.38 Explain in detail, the different methods of laying an underground cable.

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**6th Sem / Elect. Engg.**  
**Sub. : Installation & Maintenance of Electrical Equipment**

**Time : 3 Hrs.** **M.M. : 100**

## **SECTION-A**

**Note:** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 What is the use of current transformers?

  - stepping up AC current
  - Measuring and protection
  - Stepping down AC current
  - Both B & C

Q.2 What is the full form of ELCB?

  - Electronic loss circuit breaker
  - Earth leakage circuit breaker
  - Electronic least circuit breaker
  - Earth loss circuit break

Q.3 The earth tester is used to measure \_\_\_\_\_

  - Insulation resistance
  - Earth resistance
  - Voltage\
  - None of the above

Q.4 The earthing is necessary to give protection against \_\_\_\_\_.

  - Voltage fluctuation
  - Overloading

- c) Danger of electric shock  
 d) High temperatures of the conductors
- Q.5** Which what is the value of minimum clearance distance that equipment should be kept away from power lines of 50KV lines?  
 a) 10feet                    b) 20 feet  
 c) 50 feet                    d) 100 feet
- Q.6** Which of the following material is used to measure insulation resistance?  
 a) Wheatstone bridge    b) Galvanometer  
 c) Megger                    d) Kelvin double bridge
- Q.7** Isolator in substation is open under \_\_\_\_\_ condition.  
 a) No load                    b) Short circuit  
 c) Full load                 d) None of the above
- Q.8** Which solutions are added into the lead acid battery?  
 a) Distilled water            b) acid water solution  
 c) Transformer oil          d) Both A & B
- Q.9** The rating of fuse wire is always in expressed in \_\_\_\_\_  
 a) amperes                    b) Volts  
 c) ampere-volts            d) ampere hours
- Q.10** A buchholz relay is used for \_\_\_\_\_  
 a) Protection of a transformer against all internal faults  
 b) Protection against leakage current only  
 c) Protection of a transformer against all external faults  
 d) All of the above

### Section B

- Note:** Objective types Questions. All Questions are compulsory. (10x1=10)
- Q.11 Name the various parameters in handling of tools?  
 Q.12 What are bird guards?  
 Q.13 How a lighting arrestor is used in any circuit?  
 Q.14 Name the various tests performed on power cable.  
 Q.15 What is dead end?  
 Q.16 For which type of screws, Cross head screwdriver is used?  
 Q.17 Define jumper.  
 Q.18 What is the full form of CT?  
 Q.19 Explain danger notice.  
 Q.20 What is drying out?

### Section-C

- Note:** Short answer type Questions. Attempt any twelve Questions out of fifteen Questions. (12x5=60)
- Q.21 Explain briefly Rule 88 for guarding.  
 Q.22 What are bird guards? Explain with the help of a diagram.  
 Q.23 How over hauling of motors is carried out?  
 Q.24 Differentiate between CT and PT.  
 Q.25 With the help of suitable diag. Explain the laying of Cable  
 a) direct in ground      b) in pipes  
 c) in conduits.