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### 4th Sem / Electrical Engg.

### Subject : Estimating and Costing in Electrical Engineering

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory  
(6x1=6)

Q.1 What is the maximum Load that can be connected in a circuit connecting only light point?

- a) 500 watt
- b) 1500
- c) 1000 watt
- d) 1200

Q.2 At least \_\_\_\_\_ quotation are called for the purchase of material.

- a) Five
- b) Three
- c) One
- d) Two

Q.3 Which insulating material is used law voltage cable?

- a) impregnated paper
- b) rubber
- c) Skin and cotton
- d) PVC.

- Q.4 Which one is temporary wiring system?
- a) Cleat Wiring
  - b) Batten Wiring
  - c) casing and capping
  - d) conduit Wiring
- Q.5 How many earth connection are required for the motor frame as per IE rules?
- a) One
  - b) Two
  - c) Three
  - d) None of these
- Q.6 In a substation the following equipments not installed
- a) Exciter
  - b) Series Capacitors
  - c) Shunt reactors
  - d) Voltage transformer

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory.  
(6x1=6)

Q.7 Define profit.

Q.8 What is the full form of DPIC ?

Q.9 Expand ACSR?

Q.10 Define earthing ?

Q.11 What is a switch?

Q.12 What is estimating?

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## **SECTION-C**

**Note:** Short answer type questions. Attempt any eight questions out of ten questions.  $(8 \times 4 = 32)$

- Q.13 What are the advantages of estimation?
- Q.14 What are the advantages of indoor substation?
- Q.15 What is the procedure adopted for the selection of main switch for an installation?
- Q.16 Name various type of wiring system?
- Q.17 What are the qualities of good estimator?
- Q.18 Explain labour cost ? Also name the various methods calculating labour charges.
- Q.19 Calculating the full load current for a 7.5 HP , 3 phase , 415 Volts Induction motor , assuming Power factor .085 lagging
- Q.20 Difference between domestic and industrial wiring.
- Q.21 What is price list , explain with example.
- Q.22 What is the difference between limited tender and global tender ?

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## **SECTION-D**

**Note:** Long answer type questions. Attempt any two questions out of three questions.  $(2 \times 8 = 16)$

- Q.23 Prepare a tender notice performa for the purchasing of 20 numbers of 200 kva transformer 11kV/415volts, 3 phase, 50 Hz.
- Q.24 Two rooms of same size 5mtrx4mtrx3.5mtr is required to be provided with Two lamp, one fan Two fluorescent tube and one 5 amp socket in each room. Each of the point is controlled by individual switch. Mark the location of the electrical point suitably and draw the installation plan. Also calculate the length of wire and other material and prepare a complete estimate list of material required for the wiring the room in concealed conduit wiring system.
- Q.25 Prepare a list of material for a service connection by 2 core PVC cable to a house (single storey) at 230 volts single phase 50 Hz,. The size of the cable is 10 sq mm aluminium. The supply is to be given from over head 415volts 3 phase 4 wire line which is 50 meters away from the building.

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