

No. of Printed Pages : 4
Roll No.

180935/170935

3rd Sem / Electrical Engg.

Subject:- Estimating and costing in Electrical Engineering

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 At least _____ Quotation are called for the purchased of a material.
a) Four b) Three
c) Two d) One
- Q.2 tender is an .
a) Quotation
b) Purchase order
c) Agreement between two parties
d) Comparative statement
- Q.3 The Overhead charge has includes.
a) Taxes
b) Rent of offices and insurances
c) Advertising
d) All of the above
- Q.4 TPIC means.
a) Triple pole iron clad
b) Triple pole iron core
c) Transmission pole iron clad
d) Transmission pole iron core

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- Q.5 For marriages and other function _____ Wiring is preferred.
a) Casing capping wiring
b) Conduit wiring
c) Cleat wiring
d) Batten wiring
- Q.6 The switch board should be installed at the height of _____ meter from the floor.
a) 1.5 b) 2
c) 3 d) 4
- Q.7 The wire which connect energy meter of consumer with the nearest poll is called.
a) Distribution line b) Transmission line
c) Service line d) Bus bar
- Q.8 Earth wire is located at _____ of tower.
a) Bottom b) Middle
c) Top d) Any of the above
- Q.9 In overhead lines usually _____ conductors are used.
a) Copper b) Aluminum
c) Sliver d) ACSR
- Q.10 Isolator always operated at _____ load.
a) On b) Off
c) Either on or off d) Variable

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 A personal who prepare estimate is called _____.
- Q.12 Full form of ASCR.

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- Q.13 Define line support.
- Q.14 Define net price.
- Q.15 Expand MCB.
- Q.16 In industries required _____ phase service line.
- Q.17 Erath wire is usually made of _____.
- Q.18 Define substation.
- Q.19 maximum number of points in power sub circuit are _____.
- Q.20 Write the difference between wire and cable.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Give the purpose of estimating and costing.
- Q.22 Draw the specimen of comparative statement.
- Q.23 Explain the casing and capping wiring system.
- Q.24 Explain the working principle of ELCB.
- Q.25 Write the general IE rules for residential wiring.
- Q.26 A 50BHP motor is to be installed in an industry. Draw its layout of wiring marking main switch and Starter of motor and estimate quantity of material required.
- Q.27 Give the steps for estimating and costing of industrial wiring
- Q.28 Enlist the equipment used in a substation.
- Q.29 A pole for an overhead 11 kv, 3 phase 50 Hz line is to be installed. Prepare a list of material required and estimate the cost of that installation

- Q.30 List wiring accessories used for domestic installation
- Q.31 Compare outdoor and indoor substation.
- Q.32 Differentiate the term earnest money and security deposit.
- Q.33 Draw and explain the location of main board and Distribution board.
- Q.34 Differentiate between overhead service connection and underground service connection.
- Q.35 State the function of main components of overhead line.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Define Labour charge. Explain the different methods of calculating of Labour charges.
- Q.37 A single room of size 5mtx4 mt with one lamp, one fan, one Tube and 5 Amp. socket outlet. Estimate and costing of room as under-
 - i) Draw the installation plan and wiring diagram.
 - ii) Calculate length of conduit and wire.
 - iii) Prepare the list of material required for wiring.
- Q.38 Draw key diagram of 66kV/11 kV substation.