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4th Sem / Branch : Elect.Power Station Engg.
Elect. & Eltx Engg
Subject:- Estimating and Costing in Electrical Engg.

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 The set of rules are to be verified on completion of wiring on any new installation
a) IE rules, 1950 b) IE rules, 1956
c) IE rules, 1957 d) None of these

Q.2 The maximum span up to which the RCC poles can be used
a) 10-20 m b) 30-50 m
c) 60 m d) 80-100 m

Q.3 The maximum number of lighting points that can be connected in a circuit
a) 5 b) 10
c) 2 d) 8

Q.4 Following modes of tendering are used by purchase department
a) Open tendering b) Limited tender
c) Spot tendering d) All of these
e) Only (a)&(b)

Q.5 Name the cable or conductor which connects the distributor to the consumer terminals
a) Service Mains b) Distributor
c) Feeder d) None of the above

Q.6 The important factors which govern the design of any lighting scheme are
a) Illumination lavel b) Mounting height
c) Utilization factor d) All of these
e) Only (a)&(b)

Q.7 Use of ElCB is advisable for
a) Human safety
b) Ease to reset when trips
c) Protecting from short-circuit
d) None

Q.8 The dimension of the copper strips used for the strip earthing is
a) 25 mm × 4mm b) 25 mm × 3 mm
c) 30 mm × 4 mm d) 30 mm × 3 mm

Q.9 For what voltage levels are the screwed conduit circuits used ?
a) Less than 250 V
b) For voltages between 250 V - 600 V
c) For voltages above 600 V
d) None of these

Q.10 During testing leakage current in the new wiring system should not exceed.
a) 1/2000 of the maximum load current
b) 1/3000 of the maximum load current
c) 1/4000 of the maximum load current
d) 1/5000 of the maximum load current

SECTION-B

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

Q.11 DPIC stands for _____

Q.12 VIR stands for _____

Q.13 Define Estimating.

Q.14 Write any one component of substation

Q.15 Define earnest money.

Q.16 Name any one type of domestic wiring

Q.17 ELCB stands for Excess load Current breaker (T/F)

Q.18 Pin type insulator is used up to _____KV.

Q.19 Joint boxes are required in Looping-in - system (T/F)

Q.20 Direct lighting is generally employed for industrial purposes (T/F)

SECTION-C

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

Q.21 Explain the use of insulator in overhead transmission line.

Q.22 Explain the different types of line supports used in overhead lines.

Q.23 Explain the significance of comparative statement.

Q.24 Enlist the advantages and disadvantages of the cleat wiring.

Q.25 Enlist the six important requirements of an electric installation

Q.26 Explain the guidelines for power wiring in workshops/industries.

Q.27 Explain the different types of fuses.

Q.28 Explain the type of wiring scheme.

Q.29 Explain the significance of market survey.

Q.30 Explain the rod earthing.

Q.31 Give a comparison between the indoor and outdoor substations.

Q.32 Explain I.E. Rule 54.

Q.33 Draw the single line diagram for a 11kv substation.

Q.34 Give the advantage of conduit wiring.

Q.35 Enlist the points to be considered at the time of erection of overhead lines.

SECTION-D

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

Q.36 A 15 HP,400 V,3 phase induction motor is to be installed to drive a machine. Supply is to be given from a pole situated at a distance of 7 meter. Draw the Electrical connection wiring diagram and prepare the list of required material

Q.37 Make a specimen tender for the Purchasing of 15 no. of three phase 440 volt heavy duty 5HP squirrel cage induction for a factory .

Q.38 Draw the key diagram of 66Kv/11Kv substation along with the list of required equipments /accessories