

Code: A-E616123-M

I SEMESTER EXAM - 2025-26

2 x 45

Std.: XII

Sub: Electrical Maintenance -Paper I

Marks: 40

Date:

Roll No.: _____

Time: 2½ hrs

Q.1 Attempt : (Any Four)

(4)

- a) _____ is used as fuse element
 - i) Lead tin alloy ii) Carbon iii) Gold
- b) The most common material used for filament lamp is _____
 - i) Nichrome ii) Tungsten iii) Tantalum
- c) The height of the switch board should be _____ metr from the floor.
 - i) 2 ii) 1.5 iii) 2.5
- d) Neon tubes are used for _____ purpose.
 - i) industrial ii) domestic iii) Advertising
- e) _____ conductor is used for High Voltage Overhead transmission line.
 - i) ACSR ii) Copper iii) Iron
- f) Fluorescent lamp causes _____ effect.
 - i) skin ii) stroboscopic iii) no

Q.2 Attempt : (Any Three)

(6)

- a) Draw a neat and labelled panel wiring diagram of DC compound motor with a 4 point starter,
- b) Draw circuit diagram of 3 point Godown wiring,
- c) Draw construction diagram of moving iron attraction type instrument,
- d) Draw neat and labelled circuit diagram of an Autotransformer starter,
- e) Draw a neat and labelled circuit diagram for circuit having 1-phase energy meter, 1-phase watt meter, voltmeter and ammeter with load.

Q.3 Attempt : (Any Three)

(6)

- a) Give conventional symbols for the following.
 - i) Choke ii) AC/DC voltmeter iii) Star-Delta starter
 - iv) Socket outlet 3-pin 15 A
- b) Write short note on neon lamp with diagram.
- c) Name different types of cables according to working voltage.
- d) Write short note on Cleat wiring with diagram.
- e) Write any four disadvantages of wooden casing capping wiring.

Q.4 Attempt : (Any Two)**(6)**

- a) Describe working of high pressure mercury lamp with circuit diagram,
- b) Which are the different methods of laying underground cable? Explain any one.
- c) Compare ordinary fuse with H.R.C. fuse.

Q.5 Attempt : (Any Two)**(6)**

- a) Explain Conduit wiring. What precautions should be taken while installing it ?
- b) Explain the factors that must be considered while selecting wiring systems.
- c) Define :
 - i) Fusing factor
 - ii) Fusing Current

Q.6 Attempt : (Any Two)**(12)**

- a) Write at least twelve general rules of wiring as per ISL.
 - b)
 - i) Explain the construction of underground cable with neat diagram.
 - ii) Compare Overhead wiring with Underground wiring.
 - c) Compare different types of wiring in tabular form.
-