[HKCD-25]

CERTIFICATE/DIPLOMA EXAMINATION 2025

Certificate in Electrical Wiring

Fundamentals of Electricity & Electrical Wiring

[CEW-01]

Full Marks: 70

Time: 3 hours

The figures in the margin indicate full marks for the questions

(1) Answer any five from the following questions : 2x5=10

(a) Give the full form of:
(i) SWG (ii) PVC

(b) For a sinusoidal wave form, state the relation between:
(i) average value and maximum value
(ii) RMS value and maximum value

(c) Mention the different categories of Electrical lamps.

(d) Give the full form of:
(i) BIS (ii) IEE

(e) Mention one use of a hacksaw.

(f) Name the instrument used to measure:
(i) Current (ii) Power

(2) Answer any four from the following questions: 3x4=12

(a) State the common types of wiring.

(b) A current of 8 amperes is flowing for 10 seconds between two points. Find the amount of charge in coulombs that flows between the points.

(c) Draw the circuit diagram of a wattmeter and label the different coils.

(d) Mention some of the safety steps as prevention to electrical dangers.

(e) What is an electrical wiring diagram?

(3) Answer any four from the following questions: 6x4=24

(a) What are the main responsibilities of an electrician and wireman?

(b) What is electro-magnetism? Show how it is developed.

(c) Discuss the Indian Electricity Rule.

(d) With the help of a neat diagram explain the different parts of a vernier calliper.

(e) Define the following terms and give the units of each:
(i) Charge (ii) Power (iii) Potential difference

(4) Answer any three from the following questions : 8x3=24