Total No. of Printed Pages—4

22/VC/EL

2022

ELECTRONICS

(Vocational Course)

Full Marks : 30

Time : 1 hour

The figures in the margin indicate full marks for the questions

1. Choose the correct answer : 1×8=8

(a) Single-phase motor runs on

(i) single-phase AC supply

(ii) single-phase DC supply

(b) Pipe earthing is commonly used for

(i) domestic installation

(ii) industrial installation

(iii) commercial installation

(c) In a socket outlet, third thicker terminal is used for

(i) neutral

(ii) earth

(iii) phase

(d) Full-wave rectifier consists of

(i) 2 diodes

(ii) 3 diodes

(iii) 4 diodes

(iv) 1 diode

(e) Battery converts

(i) chemical energy into electrical energy

(ii) electrical energy into chemical energy

(iii) thermal energy into electrical energy

(f) The full form of LED is

(i) light-emitting diode

(ii) low-emitting diode

(iii) light-emitting data

(iv) light-encounter data

(g) Instrument transformers are used to measure

(i) low voltage

(ii) low current

(iii) high voltage and high current

(h) Induction cooker works on the principle of

(i) magnetic effect

(ii) thermal effect

(iii) induction effect

(iv) None of the above

2. Answer the following questions in *1* word or *1* sentence each (any *four*) : 1×4=4

(a) What is billing?

(b) What are the types of electric bell?

(c) What are surge arresters?

(d) What is earthing?

(e) What is electronic choke?

(f) What is inverter?

3. Answer the following questions in *3* or *4* sentences each (any *three*) : 2×3=6

(a) State the parts of electric iron.

(b) What are step-up and step-down transformers?

(c) What is Miniature Circuit Breaker (MCB)?

(d) What are primary cell and secondary cell?

(e) State the types of wires.

4. Answer the following questions in *60–80* words each (any *three*) : 4×3=12

(a) What is meant by estimate? Explain the various elements of estimate.

(b) Explain the working principle of solar cell.

(c) Explain the basic parts of regulated DC power supply. Draw the block diagram of regulated DC power supply.

(d) State the working principle of autotransformer.

(e) State the working principle of tube light set.

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