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20/VC/EL

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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) Which one of the following is not an electric bell?

(i) Single-stroke bell

(ii) Starfish desk bell

(iii) Vibrating

(iv) Buzzer

(b) Electric iron heating element is made from

(i) copper

(ii) aluminium

(iii) MS sheet

(iv) Nichrome wire

(2)

(c) Transformer is a _____ device.

(i) dynamic

(ii) static

(iii) neutral

(iv) None of the above

(d) On which law, principle of water heater works?

(i) Joule's law

(ii) Faraday's law

(iii) Mutual induction

(iv) All of the above

(e) Hot plate is used

(i) for cooking purpose

(ii) in industry

(iii) in factory

(iv) All of the above

(f) The SI unit of charge is

(i) ohm

(ii) ampere

(iii) coulomb

(iv) volt

(3)

(g) Which one is not the type of transformer according to construction?

(i) Step-up transformer

(ii) Core-type transformer

(iii) Shell-type transformer

(iv) Berry-type distributed core transformer

(h) Which one of the following semiconductor materials is used in photovoltaic cell?

(i) Copper

(ii) Gold

(iii) Germanium

(iv) Silicon

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

(a) State the types of electric iron.

(b) What is electronic choke?

(c) What do you mean by billing?

(d) Write the full form of CLF.

(e) What is an inverter?

(f) Outer cover of an electric geyser is made from what?

(4)

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

- (a) What are the types of earthing?
- (b) State the working principle of electric iron.
- (c) Explain how to test choke in tube light set.
- (d) Why is switch connected in phase wire?
- (e) What is meant by multi-conductor cable?

4. Answer the following essay-type questions (any *three*) : 4×3=12

- (a) Explain the working principle of electric geyser and give its uses.
- (b) What is photovoltaic cell? Draw a block diagram of solar power supply.
- (c) Explain the parts and function of an electric iron.
- (d) Describe a full-wave bridge rectifier with filter.
- (e) What is Earthing? Explain pipe earthing.

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