43 (ARC-4) 4·6

2018

BUILDING SERVICES–II

Paper : ARC-4·6

Full Marks : 100

Time : Three hours

The figures in the margin indicate full marks for the questions.

1. Fill in the blanks : 1×5=5

   (a) The full form of LED is _____ .

   (b) The full form of MCB is _____ .

   (c) _____ is a process in which two or more metal items are joined together by melting.

   (d) A _____ is an electrical component that can make or break an electrical circuit.

   (e) A _____ allows the flow of current.

2. Write short notes on ***(any six)***. Give sketch if necessary : 5×6=30

(a) Conduit Wiring System

(b) Indirect Lighting

(c) Types of wiring accessories

(d) Compact fluorescent lamps

(e) Control measures for unwanted illumination

(f) Lighting design for stadiums

(g) Fluorescent lamps

(h) Halogen lamps.

3. What is Conductor ? What are different types of conductors ? 2+3=5

4. State the differences between wires and cables. State the Inverse-square law. 2+3=5

5. Answer the following : ***(any three)*** 3×10=30

(a) What is earthing ? Describe the different types of earthing with sketches.

(b) What are fuses ? What are electrical substations ? Differentiate between electrical transmission and electrical distribution.

(c) Write down the properties of a good conductor.

(d) Make a typical housing circuit.

(e) Make a single line interior plan of a 2 BHK apartment (not to scale) and do the electrical layout of the same showing fans, exhaust, lighting fixtures, circuits, switches, switchboards and distribution board.

6. Answer the following : ***(any five)*** 5×5=25

(a) Write few lines on different systems of wiring.

(b) Write short notes on :

(i) Electrical substations

(ii) Plate earthing.

(c) Draw the electrical symbols of the following :

(A) Switch

(B) Ceiling fan

(C) Earthpoint

(D) Wall lamp

(E) Distribution board.

(d) Explain wooden casing and capping wiring system.

(e) Explain Cleat wiring system with necessary diagrams.

(f) Explain the different types of circuit breakers with the help of sketches.
