CBCS SCHEME

USN | | | | | | | | | | |

15ARC53

Fifth Semester B.Arch. Degree Examination, Aug./Sept.2020
Building Services – II

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Draw relevant sketches wherever necessary.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-1

1 a. Explain with neat block diagram, how electricity is transmitted from generating station to the end user. **(12 Marks)**

b. Define the terms:
(i) Voltage (ii) Current (iii) Connected load (iv) Maximum Demand **(08 Marks)**

OR

2 a. What is a substation? Explain the various types of substations. **(10 Marks)**

b. What is a transformer? Explain the different types of transformers. **(10 Marks)**

Module-2

3 Explain the surface conduit system and casing capping system of wiring used in residential buildings. **(20 Marks)**

OR

4 What is renewable energy system? Explain any one type in detail. **(20 Marks)**

Module-3

5 a. What is a fuse? Explain the different types of fuses. **(10 Marks)**

b. What is a Miniature Circuit Breaker? What are the advantages and disadvantages of MCBs over fuses? **(10 Marks)**

OR

6 What is earthing? Explain anyone type of earthing system in detail **(20 Marks)**

Module-4

7 Write short notes on :
a. Florescent lamp b. CFL c. LED d. Incandescent Lamp **(20 Marks)**

OR

8 a. Explain the laws of Illumination. **(05 Marks)**

b. Explain the various methods of lighting. **(15 Marks)**

Module-5

9 Draw a single line plan of a two bedroom residence and prepare the electrical layout using the standard symbols. Calculate the electrical load for the lighting of the residence. **(20 Marks)**

OR

10 a. Draw a single line plan of a doctor's clinic and prepare the electrical layout using the standard symbols. **(15 Marks)**

b. What are extra low voltage systems? Explain briefly. **(05 Marks)**

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