

CBCS SCHEME



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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.*

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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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.