

# CBCS SCHEME



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## Fourth Semester B.Arch. Degree Examination, June/July 2026 Building Services – II

Time: 3 hrs.

Max. Marks: 100

*Note: Answer any FIVE full questions, choosing one full question from each module.*

### Module-1

- 1 a. Explain the process how electricity is supplied to your house from power generating station with diagram. (10 Marks)
- b. Write short notes on:
  - i) Ring main unit
  - ii) Transformers
  - iii) Substations
  - iv) Transmission and distribution lines (10 Marks)

OR

- 2 a. What are the various methods for Green Power Generation? Explain briefly how such technology would be adopted to any building project. (10 Marks)
- b. Differentiate underground cabling versus overhead cabling for transmission and distribution system. (10 Marks)

### Module-2

- 3 a. What is a Net Zero Building? Explain the features of a net zero building with a sketch. (10 Marks)
- b. Write a short notes on:
  - i) Generators and its types
  - ii) HT panels and LT panels (10 Marks)

OR

- 4 a. Explain different types of wiring installation systems used in building projects, with sketches. (10 Marks)
- b. Explain distribution system in high rise building. (10 Marks)

### Module-3

- 5 What is Earthing? Explain with neat sketches plate type and pipe type of earthing systems. (20 Marks)

OR

- 6 Write short notes on:
  - a. Fuse
  - b. ELCB
  - c. MCB
  - d. Air circuit breakers (20 Marks)

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-4**

- 7 Discuss in detail:
- Lighting techniques with sketches
  - Basic types of lighting
- (20 Marks)

**OR**

- 8 Write short notes on:
- Glare
  - Street lighting
  - Quality and Quantity in lighting
  - Façade and landscape lighting
- (20 Marks)

**Module-5**

- 9 What is ELVS? Explain its necessity explain in detail any 3 types of ELVS used in a building.
- (20 Marks)

**OR**

- 10 For a 2 BHK residence, prepare an electrical layout, calculate electrical load also justify the choice of luminaries + lamps, positioning and spacing, controls proposed. Give the justification using sketches/sections etc.
- (20 Marks)

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