

# CBCS SCHEME

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18ARC43

## Fourth Semester B.Arch. Degree Examination, Jan./Feb. 2023 Building Services – I

Time: 3 hrs.

Max. Marks: 100

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

### Module-1

- 1 a. Explain History of Sanitation with respect to human civilization. (10 Marks)  
b. Explain conservancy system to water carriage system. (10 Marks)

OR

- 2 Explain Municipal water supply system with neat sketch. (20 Marks)

### Module-2

- 3 Explain systems of sewerage – One pipe, Two pipe, Partially ventilated single stack system and single stack system with neat sketches. (20 Marks)

OR

- 4 a. Explain storm water drainage system through piped drains and open drains. (10 Marks)  
b. What are the advantages of rain water harvesting? (10 Marks)

### Module-3

- 5 Explain Gate valve, Globe valve, Butterfly valve and pressure reducing valves with neat sketches. (20 Marks)

OR

- 6 Explain direct hot water system and Indirect hot water system with neat sketches. (20 Marks)

### Module-4

- 7 Write short note on the following soil appliances:  
a. Water closet  
b. Bidet  
c. Urinals  
d. Flush valve (20 Marks)

OR

- 8 Explain Vermicomposting and Organic Waste Converter used in solid waste management, with neat sketches. (20 Marks)

### Module-5

- 9 Explain the causes of fire, reasons for loss of life due to fire and development of fire. (20 Marks)

OR

- 10 Explain Solar Hot Water generation through neat sketch. (20 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.