

CBCS SCHEME

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21ARC35

Third Semester B.Arch. Degree Examination, June/July 2023 Building Services – I

Time: 3 hrs.

Max. Marks: 100

*Note: 1. Answer any FIVE full questions, choosing one full question from each module.
2. Sketches shall be written wherever required.*

Module-1

- 1 a. How is water borne diseases caused? Explain. (06 Marks)
b. What is Hygiene? Discuss personal hygiene. (04 Marks)
c. Explain the points of importance in any water supply scheme. (10 Marks)

OR

- 2 Explain with the help of a bubble diagram the process of Water Purification. (20 Marks)

Module-2

- 3 Distinguish between:
i) Inspection chamber and Manhole (with neat sketches)
ii) Gully trap and Bottle trap. (20 Marks)

OR

- 4 a. With help of neat sketch, explain the working of septic tank. (10 Marks)
b. What is rain water harvesting in a domestic house? (10 Marks)

Module-3

- 5 a. Mention the principles of house drainage. (08 Marks)
b. With neat sketches explain
i) Single stack system
ii) One pipe system partially ventilated
iii) Two pipe system. (12 Marks)

OR

- 6 a. With help of neat sketch briefly explain:
i) Tap and mixer
ii) Indian water closet, European water closet.
iii) Flush tank and Flush valve (12 Marks)
b. Explain Air relief valve and pressure relief valve. (08 Marks)

Module-4

- 7 a. What is Solid Waste Management? List the various sources from where the waste is generated. (13 Marks)
b. What is Wormi composting explain. (07 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.

OR

- 8 a. With help of neat sketch explain working of oxidation pond. (10 Marks)
b. Indicate the standard heights from the finished floor level for the following fixtures with sketches:
i) Wash basin
ii) EWC
iii) Hot and Cold diverter
iv) Shower unit
v) Geyer. (10 Marks)

Module-5

- 9 Draw a schematic fire escape staircase and list mandatory dimensions to
i) Riser
ii) Tread
iii) Landing
iv) Headroom
v) Staircase railing. (20 Marks)

OR

- 10 a. List class of fire extinguishers for various fire hazards. (10 Marks)
b. Explain the use and importance of
i) Fire alavaen
ii) Wet riser in fire safety. (10 Marks)
