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## Fourth Semester B.Arch. Degree Examination, June/July 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. Define the terms Hygiene. List general Hygiene habits practiced to keep good Human health. (10 Marks)  
b. What is Waterborne disease? Explain briefly its causes and most commonly observed diseases. (10 Marks)

OR

- 2 Discuss various stages involved in water treatment process. Support the answer with neat sketches. (20 Marks)

### MODULE - 2

- 3 a. Name the different Joints commonly used in Pipes. (03 Marks)  
b. What are the various units associated with "PRIMARY TREATMENT" of sewage. Briefly highlight the significance of each. (08 Marks)  
c. With the help of neat sketch explain the working of septic tank (09 Marks)

OR

- 4 a. What are methods adopted to determine the quantity of storm water? (06 Marks)  
b. With help of neat sketch explain "RAINWATER HARVESTING". (09 Marks)  
c. Explain briefly method adopted to drain out waste/storm water from basements and Podium in project. (05 Marks)

### MODULE - 3

- 5 Sketch and explain Hot and Cold water supply piping in a typical bathroom of a residence mark all the fittings and fixtures. (20 Marks)

OR

- 6 a. Sketch and explain Globe valve, Floor trap. (10 Marks)  
b. Explain Single stack and Two stack system. Mention the suitability of each system. (10 Marks)

### MODULE - 4

- 7 Explain with neat sketches water closets, kitchen sinks, Urinals and Both Tubs. (20 Marks)

OR

- 8 Define the term solid waste management. Discuss various steps involved in solid waste management (20 Marks)

### MODULE - 5

- 9 Suggest various important measures for Fire safety and prevention in a commercial building. (20 Marks)

OR

- 10 a. Explain what is Fire Control Room. (10 Marks)  
b. Explain Central Vacuum Waste Collection System. (10 Marks)

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