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18ARC43

Fourth Semester B.Arch. Degree Examination, July/August 2022 Building Services - I

Time: 3 hrs.

Max. Marks: 100

- Note :** 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. Support your answer with substantial sketches.
3. Wherever required support your narrations with a current situation as example.

Module-1

- 1 a. Explain in detail the conservancy and water carriage systems in sanitation. Explain the advantages and disadvantages in each system. (12 Marks)
b. Explain various forms of Water sources for water supply. (08 Marks)

OR

- 2 a. With a help of a neat diagram, explain the Water Treatment process. (12 Marks)
b. Draw a neat schematic diagram, to reflect the pattern followed to serve water to the source to user. (08 Marks)

Module-2

- 3 Write short notes on :
a. Catch basins
b. Clean outs.
c. Leach field
d. Air gap and Back flow. (20 Marks)

OR

- 4 What is Surface Runoff? Mention the various methods of Flood control and Rain water harvesting strategies with neat sketches. (20 Marks)

Module-3

- 5 What is Plumbing? Explain with neat sketches where these fixtures are used. P – trap , Floor traps , Single stack and Two stack piping. (20 Marks)

OR

- 6 With the help of a plan of Small house with 1 kitchen , 1 bath/toilet , Sump and Overhead tank draw plumbing and Sanitary diagram. (20 Marks)

Module-4

- 7 What is Solid Waste Management? List and discuss various sources of waste and waste produced by these sources. (20 Marks)

OR

- 8 What is Organic Waste Treatment? Explain any 2 types of Organic Waste treatment with sketches. (20 Marks)

Module-5

- 9 a. Explain the importance of five Safety Systems in a building. (12 Marks)
b. What are the standard sizes of following, explain with sketches :
i) Riser ii) Tread iii) Landing iv) Roiling. (08 Marks)

OR

- 10 Write short notes on :
a. Fire Alarm (05 Marks)
b. Wet riser and Dry riser. (10 Marks)
c. Standards on Emergency Exit. (05 Marks)

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