



USN

--	--	--	--	--	--	--	--	--	--	--	--

15ENG43

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

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. What are the factors that affect “RATE OF DEMAD”? (08 Marks)
 b. Population of a town is obtained from census Data. Forecast the population in 2000 and 2010 by
 i) Arithmetical increase method
 ii) Geometrical increase method
 iii) Incremental increase method.

Year	Population
1950	15000
1960	19000
1970	24000
1980	29500

(12 Marks)

OR

- 2 a. Mention and describe various forms of sources for water supply schemes. (05 Marks)
 b. Describe 4 methods of layout of water supply distribution in an area of a Town/city. (15 Marks)

Module-2

- 3 Distinguish between :
 a. Inspection chamber and Manhole (10 Marks)
 b. Gully Trap and Grease Trap (10 Marks)

OR

- 4 a. What is first flush? (05 Marks)
 b. Explain two methods of harvesting rain water in a domestic house. (15 Marks)

Module-3

- 5 With sketch, explain functions of
 i) P-trap ii) Bottle trap iii) Gate valve iv) Pressure reducing valve. (20 Marks)

OR

- 6 Draw a neat sketch of a building showing all plumbing details. (20 Marks)

Module-4

- 7 a. What are requirements of a good type of water closet. (05 Marks)
 b. With neat sketch Describe
 i) Indian water closet (10 Marks)
 ii) European water closet (05 Marks)
 c. With neat sketch explain “HEALTH FAUCET”.

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. What is solid waste management? List and Discuss various sources of waste and waste produced by : i) Residential ii) Industrial iii) Commercial (16 Marks)
iv) Institutional v) Biomedical Institutes. (04 Marks)
- b. Explain briefly Bangalore Method of composting refuse. (04 Marks)

Module-5

- 9 List class of fire extinguishers for various fire hazards. Describe application for types of fire. (20 Marks)

OR

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