

# CBCS SCHEME



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15ENG/ARC43

## Fourth Semester B.Arch. Degree Examination, Jan./Feb. 2021 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 Write short notes on :  
i) Health Hygiene ii) Water Borne diseases iii) Rural sanitation iv) Epidemic diseases. (20 Marks)

OR

- 2 a. Write down all parameter and limits of drinking water standards as per BIS 10500-2012. (10 Marks)  
b. Write short notes on Efficient usage of water. (10 Marks)

### Module-2

- 3 a. Draw neat sketch of residential building showing following details  
i) Gully trap ii) Chamber iii) Manhole iv) Intercept trap. (10 Marks)  
b. Draw flow diagram of sewage treatment plant. (10 Marks)

OR

- 4 With neat sketch, explain roof top rain water harvesting and also recharging to improve underground water table. (20 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 With sketch explain ;  
i) Wash basin ii) Water closet iii) Bath tub iv) Cisterns (20 Marks)

OR

- 8 Explain briefly different methods adopted for collection, segregation, treatment and disposal of municipal solid waste. (20 Marks)

### Module-5

- 9 a. Explain briefly on fire classification of buildings. (10 Marks)  
b. Write short notes on : i) Causes of fire ii) Fire escape stair case. (10 Marks)

OR

- 10 Explain working of central LPG system in high rise building. (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.