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Question Paper Code	12553
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B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2024

Eighth Semester

Civil Engineering

20CEEL803 - BUILDING SERVICES

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

	Marks	K-Level	CO
1. Write the formula to find per capita water demand.	2	K2	CO1
2. Define bib cock and classify its types.	2	K1	CO1
3. Differentiate Sewage and Sullage.	2	K2	CO2
4. Write a short note about Jacuzzi.	2	K1	CO3
5. Classify the different types of wastes.	2	K2	CO4
6. Define composting.	2	K1	CO4
7. Classify buildings according to NBC codes.	2	K2	CO5
8. List any two causes and spread of fire.	2	K1	CO5
9. List the essential components that a plumbing plan should show.	2	K1	CO6
10. Enlist the most common elements that are included in a fire escape plan.	2	K1	CO6

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) Classify the different types of valves, its components and explain any five in detail.	13	K2	CO1
OR			
b) Explain about rain water harvesting in buildings.	13	K2	CO1
12. a) Explain the different types of traps with a neat sketch.	13	K2	CO2
OR			
b) Explain the various cross section of sewer.	13	K2	CO2
13. a) Describe the methods of solid wastes disposal.	13	K2	CO4
OR			
b) Explain about the guidelines for municipal solid waste management according to solid waste management bye-laws, 2019.	13	K2	CO4
14. a) Explain about the systems of fire protection in buildings.	13	K2	CO5

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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OR

b) Discuss in detail about the planning and design of fire escape elements. 13 K2 CO5

15. a) With a neat sketch explain the plumbing drawing and its key components. 13 K2 CO6

OR

b) With a neat sketch explain about reflected ceiling plan of a fire sprinkler system. 13 K2 CO6

PART - C (1 × 15 = 15 Marks)

16. a) Explain about DEWATS and root zone water treatment. 15 K2 CO3

OR

b) Explain the grey water recycling system with its components. 15 K2 CO3