



QP CODE: 24804283

Reg No :

Name :

B.ARCH DEGREE REGULAR/SUPPLEMENTARY EXAMINATIONS, AUGUST 2024

Fourth Semester

BACHELOR OF ARCHITECTURE

19AR04006 - BUILDING SERVICES I

2019 Admission Onwards

0CB338C1

Time: 3 Hours

Max. Marks : 100

Part A

Answer any six questions out of Eight.

Each question carries 5 marks.

1. Water supply and sanitation of Indus valley civilization.
2. Importance of Sanitation.
3. Different type of surface sources of water. Explain.
4. What is water demand? What are the data required for water demand calculation?
5. List various components of a water supply system.
6. Explain flat plate solar water heater.
7. Explain Head Loss.
8. Write short notes on: a. Wash Basin, b. Bath Tub, c. Sink

(6×5=30)

Part B

Answer any four questions out of six.

Each question carries 10 marks.

9. Compare the sanitation systems in India's urban and rural areas.
10. Explain Screening, aeration, flocculation and sedimentation process in waste water treatment plant.
11. With neat sketches, explain the types and need of valves to supply hot and cold water into a domestic building.





12. The Kerala Municipality Building Rules, 1999 was amended by a notification dated January 12, 2004 issued by the Government of Kerala to include rainwater harvesting structures in new construction. Share your views on it.
13. Differentiate Combined System and Partially Separate system for drainage conveyance.
14. Explain with sketches: a. Gully Trap, b. Intercepting trap, c. Grease trap

(4×10=40)

Part C

Answer any two questions out of Four.

Each question carries 15 marks.

15. Discuss different government schemes for rural sanitation.
16. What are the guidelines for laying mains? Explain different types of distribution networking.
17. With the help of sketches, explain direct and indirect water supply systems at domestic level? What are its advantages and disadvantages?
18. What are the principles of Domestic sewer system? Draw Drainage plan for a single story house, 2 Bed rooms – 1 attached and 1 Common Bathroom. Show drainage lines from bathrooms and kitchen also show Gully traps, Manhole, and Rainwater Pipe.

(2×15=30)

