

BACHELOR OF ARCHITECTURE (B.Arch.)

Term-End Examination

00059

June, 2017

**BAR-049 : ARCHITECTURAL SCIENCES AND
SERVICES – III**

(WATER SUPPLY AND SANITATION)

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **five** questions. All questions carry equal marks. Supplement your answers with neat sketches.

1. What is 'purity of water' ? Elaborate the methods of purification of water. 14
2. Write notes on 'Manhole' and 'Sluice Valve'. 14
3. Discuss the following : 2×7=14
 - (a) Fire Storage
 - (b) Sanitary Fittings

4. Differentiate between any **two** of the following : 2×7=14
- (a) Fixture units and Flow rates
 - (b) COD and BOD
 - (c) House drain and House sewer
5. Explain the considerations for design of rain water and surface water disposal for a multi-storied residential apartment building. 14
6. Explain with sketches, the internal plumbing layout and system for a typical apartment with 1-bedroom flat arrangement. Also, determine the size of pipes. 14
7. Explain the working of a Biogas plant and its importance in sustainable waste disposal. 14
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