

BACHELOR OF ARCHITECTURE (B.Arch.)

Term-End Examination

June, 2018

00233

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

(WATER SUPPLY AND SANITATION)

Time : 3 hours

Maximum Marks : 70

Note : *Question no. 1 is compulsory. Attempt four more questions from the remaining questions. All questions carry equal marks.*

1. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$

- (a) Gully Trap
- (b) Septic Tank
- (c) Biogas plant
- (d) Flocculation
- (e) Gridiron pattern of water supply

2. What are the different sources of water supply ?
Explain any two in detail. 14

 3. Discuss in detail the water demand and
requirement standards for a building premises. 14

 4. What is Rain Water Harvesting ? Design and
detail out a rain water harvesting system for an
institutional campus. 14

 5. Describe the different internal plumbing layouts.
Detail out the methods for determining the pipe
size for a residential distribution system. 14

 6. What is a soak pit ? Detail out the design
considerations for a manhole. Support your
answer with neat sketches. 14

 7. What do you understand by wastewater
management ? Explain the different stages
adopted in a sewage treatment plant with neat
sketches. 14
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