

**BACHELOR OF ARCHITECTURE (B.Arch.)**

**Term-End Examination**

**December, 2017**

00312

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

**(WATER SUPPLY AND SANITATION)**

*Time : 3 hours*

*Maximum Marks : 70*

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

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1. Write short notes on any **four** of the following :  $4 \times 3 \frac{1}{2} = 14$
- (a) pH Value of Potable Water
  - (b) Soak Pit
  - (c) BOD
  - (d) Self-cleansing Velocity
  - (e) Septic Tank

2. What are the different types of sanitation layouts ? Design and detail a sanitation layout installation for a residential building. 14
  3. What are the different types of water supply distribution networks that can be adopted at a city level ? 14
  4. Describe the standards for purity of water. Elaborate the various methods of water purification. 14
  5. Explain the concept, principles and functioning of rainwater harvesting with neat sketches. 14
  6. What is Garbage Disposal ? Explain the garbage disposal methods that can be adopted for a city. 14
  7. Design a kitchen layout (3 m × 4.2 m) for a residence with wall hung cabinets and all necessary appliances.  
Draw a layout plan showing plumbing network and specifications. Assume suitable scales. 14
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