## **BACHELOR OF ARCHITECTURE**

### **Term-End Examination**

June, 2011

# BAR-049 : ARCHITECTURAL SCIENCES & SERVICES - III (WATER SUPPLY AND SANITATION)

Time: 3 hours Maximum Marks: 70

**Note:** Part A is compulsory. Attempt any four questions from part B. All questions carry equal marks. Support your answers with neat sketches.

#### PART - A

- 1. Write explanatory notes on the following. 2.5x4=10
  - (a) Soak pits
- (b) Acid Rain
- (c) Safe water
- (d) Hydrological cycle
- 2. Differentiate between any two of the following.
  - (a) Gravity spring and Artesian spring. 5x2=10
  - (b) Aquifer and Outcrop.
  - (c) Street Inlets and Catch Basin.
  - (d) House drain and house sewer.
- 3. Write short notes on the following. 2x5=10
  - (a) Sewage
  - (b) Fire Demand
  - (c) Chlorination
  - (d) Sedimentation
  - (e) Biogas

### PART - B

- 4. What are the methods available for supplying water to the consumers? Which one do you think to be preferable and why?
- 5. Explain the proper method of sewage disposal in a city.
- 6. Distinguish between surface drains and 10 underground drains. Why surface drains are needed?
- 7. What do you understand by the term "Rain 10 Water Harvesting"? Explain the process of installing rain water harvesting system in a single storey residential building.
- 8. What are "traps"? Why is it necessary that all sanitary fittings should be provided with individual traps? State the different traps in use.