

Roll No.

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Total No. of Pages : 01

Total No. of Questions : 08

**B.Arch. (Sem.-4)**  
**BUILDING SERVICES-II**  
**Subject Code : AR-234**  
**Paper ID : [A0926]**

Time : 3 Hrs.

Max. Marks : 50

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions in all with at least ONE question from EACH UNIT.

**UNIT-I**

1. Explain the types of sewerage systems and the patterns of collection of sewage with sketches wherever possible. (10)
2. What are manholes explain in brief. (10)  
Enlist the following :
  - a) Objectives of providing manholes.
  - b) Location of manholes.
3. Give the types of waste and explain any five natural methods of sewage disposal. Draw diagrams wherever possible. (10)

**UNIT-II**

4. Explain with sketches two surface sources of water and two sub surface sources of water. (10)
5. What is the importance of valves in water supply system? Explain any four valves with sketches. (10)
6. What are the requirements of a good distribution system? Explain the distribution system in the city of Chandigarh. (10)

**UNIT-III**

7. Based on your market survey what type of luminaries would you adopt for a hospital, also mention cost, efficiency and power consumption etc for all the mentioned luminaries. (10)
8. Explain in brief illumination required for : (10)
  - a) School.
  - b) Residence.
  - c) Cultural centre.