

B ARCH
(SEM II) THEORY EXMINATION 2017-18
ARCHITECTURAL SERVICES-1

Time: 3 Hours

Total Marks: 100

Note:

- **Read instructions carefully, attempt accordingly.**
- **All sections are compulsory.**
- **Support your answer with neat sketches**

SECTION – A

- 1. Write short notes on followings** **10X2=20**
- a. Over head tank
 - b. Urinal
 - c. Refuse
 - d. Sewer
 - e. Jointing
 - f. Hot water
 - g. Cold Water
 - h. Garbage
 - i. Drainage
 - j. Sanitary

SECTION – B

- 2. Attempt any five questions. All questions carry equal marks.** **5x10=50**
- a. What are the purposes for treatment of water?
 - b. Explain few ways by which water can be treated at domestic level.
 - c. Explain different systems of drainage for removing discharge from residential building.
 - d. Explain circular & radial method of distribution.
 - e. Explain continuous and intermittent water supply.
 - f. Difference between Gravity & Pumping method of distribution
 - g. What is hardness of water explain permanent hardness of water
 - h. Write detail notes on detection & prevention of wastage of water in the distribution system.

SECTION – C

- 3. Attempt any two questions. All questions carry equal marks.** **2X15= 30**
- a. What is a septic Tan? Describe various principles involved during construction of a septic tank?
 - b. Draw a typical arrangement of wastewater from a toilet and a kitchen in a residential building. Give details for Nahni Trap, Gulley Trap and Manhole.
 - c. Design a public toilet for an office building as mentioned below :
 - (i) W. C. (Indian) 3 Nos.
 - (ii) Urinal 3 Nos.
 - (iii) Wash Basin 2 Nos.Draw Lay out plan showing the detail of various sanitary appliances with their connectivity to the inspection chamber to the private sewer line.