

B. ARCH.
(SEM II) THEORY EXAMINATION 2018-19
ARCHITECTURAL SERVICES - II

*Time: 3 Hours**Total Marks: 50**Notes: Assume any Missing Data.***SECTION- A****Q.1. Write short notes of the following: (5X 2 =10)**

- (a) Clean outs
- (b) Bidets
- (c) Septic tank
- (d) Urinals
- (e) Relief valve
- (f) Jet pumps
- (g) Infiltration galleries

SECTION-B**Q.2. Attempt any three of the following. (5 X 3 = 15)**

- (a) Explain briefly the various stages involved in treatment of water in 'treatment plant'.
- (b) Explain various methods of rain water harvesting.
- (c) Explain the hot and cold water supply in a residential building of two storey.
- (d) Why do we need protected water supply scheme . Explain
- (e) Which system of discharge disposal will be preferred in the areas where municipal under ground sewage system is not available. Explain with proper details.

SECTION-C**Q.3. Attempt any one part of the following: (5 X 1=5)**

- (a). What are the purposes for treatment of water?
- (b). What are the general conditions to be observed in the planning of distribution of water?

Q.4. Distinguish between the following. Attempt any five: (5 X 1=5)

- (a) Artesian spring and gravity springs.
- (b) Arithmetical increase method and incremental increase method of calculating future population.
- (c) Temporary and permanent hardness of water.
- (d) Water softening and disinfection of water.
- (e) Intermittent and continuous supply of water.
- (f) Circular and radial method of distribution of water supply.
- (g) Air relief and check valve in water supply scheme.

Q.5. Attempt any one part of the following:

(5X1=5)

(a). Design a toilet on ground floor attached with master bed room as mentioned below:

- i). W.C. (European) 1no.
- ii). Bidet 1no.
- iii). Bath tub 1no.
- iv). Counter wash Basin 1no.

(b). Explain **any five** with proper sketches:

- i). Pedestal Wash Basin
- ii). Gate Valve
- iii). Water Closet
- iv). Lamp hole
- v). Gulley Trap
- vi). Vent Pipes

Q.6. Explain with the help of sketches different type of traps. What are essential requirements of a good trap? Enumerate different causes of breaking of water seal of a trap. **(5X1=5)**

Q.7. Explain the following. Attempt any five:

(5X1=5)

- (a) PH value of water.
- (b) Aquifers
- (c) Intake works.
- (d) Bell and spigot joint
- (e) Potable water
- (f) Porosity of soil
- (g) Detention tank in treatment of water.