

0605E398

Candidate's Seat No :

1/53

B.Arch. (Sem.-V) Examination

AR 505

Building Service-II

May-2017

[Max. Marks : 50]

Time : 2 Hours]

- Q-1** (a) Give water requirement standards (LPCD) for any Seven, (7)
 1) Hospital with 100 beds, 2) Office, 3) Restaurant
 4) Factories with bath room, 5) Day school, 6) Boys Hostel,
 7) Cinema, 8) Girls Hostel.
- (b) Draw neat sketch of water treatment plant and explain functions of (3)
 Any two unit.
- Q-2** (a) Explain Water demand and discuss factors affecting water demand. (4)
 (b) Calculate dimensions of Under ground and Over head water tank (6)
 For 650 students study in a Boarding School. Consider height of
 Over head tank and Depth of Under ground tank as 1.65 m. Also,
 Consider Shape of Under ground water tank as square and Shape
 of Over head water tank as Circular.
- Q-3** (a) Draw neat sketch of Ferrule and Saddle connection – (3)
 (House connection) and discuss requirement of goose neck.
 (b) Explain water supply distribution systems with neat sketch. (4)
 (c) Draw neat sketch of Over head water tank with all pipes. (3)
- Q-4** (a) Define any Four, (5)
 1) Manhole, 2) Soil pipe, 3) Inspection Chamber,
 4) Rubbish 5) Night soil,
 (b) Design a Septic tank for the following data: (6)
 1) No. of People = 55,
 2) Sewage/capita/day = 120 litres,
 3) De-sludging period = 1 year,
 4) Length to width ratio = 2:1.
 What would be the size of its soak well if the effluent from this
 septic tank is to be discharged in it ?
- Q-5** (a) Explain different types of Traps with neat sketch. (5)
 (b) Discuss in brief essentials of rural sanitation. Explain in brief (5)
 various bore hole privy and Aqua privy.
- OR**
- (b) Draw neat sketch of Sewage treatment plant and explain functions of (5)
 each unit.