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Third Semester B.Arch. Degree Examination, Dec.2015/Jan.2016
Building Services - I

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions.

- 1 a. What do you understand by per capita demand of water? How it is determined? (10 Marks)
b. Explain the factors affecting water demand. (10 Marks)
- 2 a. Explain briefly the theory of sedimentation. (08 Marks)
b. Explain with a neat sketch, continuous flow type sedimentation tank. (12 Marks)
- 3 a. Differentiate between slow sand and rapid sand filter with atleast one sketch. (12 Marks)
b. What is meant by disinfection of water? (04 Marks)
c. Explain briefly disinfection by chlorination. (04 Marks)
- 4 a. Define i) Sewer ii) Sewerage iii) Sewage iv) Sullage v) Garbage. (10 Marks)
b. Explain with a neat sketch, the working of a Drop manhole. (10 Marks)
- 5 a. What are traps? What are the requirements of a good trap? (10 Marks)
b. What is a hydrant and where it is located? What are its types? How does it work? (10 Marks)
- 6 With the help of a good sketch, show external and internal drainage system for a one bed room independent residence. Draw drainage plan and site boundary. (20 Marks)
- 7 a. Explain with neat sketches, the working of a septic tank. (10 Marks)
b. Write short notes on :
i) Oxidation pond. (05 Marks)
ii) Maintenance of House drainage. (05 Marks)
- 8 Explain the following methods of carrying water :
a. Conservancy system. (10 Marks)
b. Water carriage system. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42.8 = 50, will be treated as malpractice.