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(Following Paper ID and Roll No. to be filled in your Answer Books)											
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B.ARCH. Theory Examination (Semester-IV) 2015-16 BUILDING SERVICES (WS)

Time: 3 Hours Max. Marks: 100

SECTION-A

1. Answer all parts with brief explanation.

(2x10=20)

- (a). What is Nahani trap and where it is used?
- (b). Draw section of Manhole with proper labeling.
- (c). What is ablution tap and where it is used?
- (d). What the basic difference is between sink and wash basin?
- (e). Differentiate between 'valve' and 'tap'.
- (f). What is 'P' trap and where it is found?
- (g). Explain turbidity.
- (h). What is inspection chamber?
- (i) Differentiate between 'Bath tub' and 'shower enclosure'.
- (j) What is Lamphole?

SECTION-B

2. Attempt any **five** Questions.

- (10x5=50)
- (a). Explain the objective of treatment of potable water and illustrate water treatment plant.
- (b). Explain the objective of providing a manhole in a sewer line and explain its various components.
- (c). What are the basic principles of disposal of waste matter from building?
- (d). Explain in detail the two types of water closets with the help of neat sketches.
- (e). What are the basic principles of cold and hot water distribution within the building?
- (f). Differentiate between one pipe system and two pipe system for conveyance of waste matter.
- (g). Explain the system of distribution and storage of potable water for a Residential Colony.
- (h). Explain the working of Septic tank for a residence with the help of neat sketches.

SECTION-C

Attempt any two Questions

(15x2=30)

- 3. Design a residential toilet 1800 mm X 2400mm for a Resort cottage with European W.C., Counter Wash Basin and Shower Enclosure, etc.. Draw Lay out plan showing the detail of various sanitary fixtures with their connectivity to the inspection chamber and then to the sewer line. Also draw Cold water supply from water tank to all fixtures in the same plan.
- 4. Explain sewers made of different materials and their advantages and disadvantages with the help of neat sketches.
- 5. What is Rain Water Harvesting? Explain various methods of Rain Water Harvesting for a Primary School.