The Assam Royal Global University, Guwahati

Royal School of Architecture B.Arch., III Semester Semester End Examination, December 2018

Course Title: Building Services I
Course Code: ARC132C317

Time: 3 Hours

Maximum Marks: 50

Note: Attempt all questions as per instructions given.

The figures in the right-hand margin indicate marks.

Section - A

| Q.1. | Attempt all questions. | 2 x 8 |
|----------------------|---|-----------------------|
| a. | What are the various factors to be considered for dependability of a source? | 2 |
| - | Explain briefly. | |
| b. | Describe briefly about "Sources of water above ground". | 2 |
| c. | What do you understand by "Recharge pits" and "Recharge Shafts". | 2 |
| d. | What is meant by "flocculation" in water purification process? | 2 |
| e. | Differentiate between Conservancy System and Water Carriage System. | 2 |
| b. c. d. e. f. s. h. | Write short note on Cement Concrete Sewers. | 2 2 2 2 2 |
| g. | Define "catch basins" or "catch pits" with neat sketch. | 2 |
| h. | Explain briefly "Trenching" method of garbage disposal. | 2 |
| / | | |
| | Section – B | |
| Q.2. | Attempt any one question. | 8×1 |
| | | |
| 2 | Describe in detail about "Chemical examination of water". | |
| b. | Describe Dead End Pattern in water supply. Give its advantages and | 8 |
| | disadvantages. | |
| | | |
| Q.3. | Attempt any one question. | 8 x 1 |
| | | |
| a, | Define combined sand, grease and oil trap with neat sketch. Explain its | 8 |
| 1 | principle of working. | |
| b. | Discuss the components of typical manhole with neat sketches. | 8 |
| | | |
| Q.4. | Attempt any one question. | 9 x 1 |
| | | 0 |
| a, | Draw detailed plan and section of an overhead water tank (R.C.C) with | 9 |
| 2.4 | following dimensions, 1.2m X 1.2m X 1.5m. Do proper labelling. | 0 |
| b. | Write short note on pipes. Mention various sizes of pipes available in market | 9 |
| | and the market price of | |
| | 1 PVC Pipes | |
| | 2 Concrete Pipes | |
| | | |

| Q.5. | Attempt any one question. | 9 x 1 |
|------|--|----------|
| a | Explain following with neat sketches | 9 |
| | Bewl type or basin type urinal | |
| | 2 Bath tub 3 Single stack system | |
| | 5 Single stack system | |
| | AS - Trap | H E somi |
| b. | Explain following with neat sketches 1 Stall type or slab type urinal 2 Drinking fountain 3 One pipe system | (%) |
| | A N. J. wilder | |
| | | |
| | What are the various factors to be considered for dependability of a source? | |
| | | |
| | Describe briefly about "Nources of water above ground". | |
| | What all you understand by "Recharge yets" and "Recharge Shafts". | |
| | What is meant by "flocoupation" in water purification process? | |
| | Differentiate netween Conservancy System and Water Carriage System. | |
| | Wester share more on Cement Concrete Newsers | |
| | Define "cauch husans" or "cauch pits" was near sketch. | , page |
| | Explain briefly " enching" method of carrage disposal | |
| | E-code one case one | |
| | Describe in detail about "Chemical examination of water". | |
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| | Define combined sand, grease and firl trap with near sketch. Explain its 8 | |
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