

MANIPAL ACADEMY OF HIGHER EDUCATION**THIRD SEMESTER B. DES. (ID) DEGREE EXAMINATION – NOVEMBER 2018****SUBJECT: BID 211 – BUILDING SERVICES - I**

Monday, November 12, 2018

Time: 14:00 – 17:00 Hrs.

Max. Marks: 50

- ✍ Answer any FIVE questions.
✍ Support the answers with sketches wherever necessary.

- 1A. What do you understand by self cleansing velocity?
1B. What is a storm water inlet? Explain the various types of storm water inlets along with sketches.

 $(3+1+6 = 10 \text{ marks})$

- 2A. What are the two systems of sanitation?
2B. Explain the laying and testing of sewers.

 $(2+8 = 10 \text{ marks})$

- 3A. What are the general considerations to be observed in the planning of water distribution system?
3B. Describe any two methods of layout for distribution of water in a city.

 $(5+(2\frac{1}{2} \text{ marks} \times 2) = 10 \text{ marks})$

- 4A. What is Air conditioning?
4B. Explain the different types of air conditioners along with sketches.

 $(2+8 = 10 \text{ marks})$

5. What do you mean by:

- 5A. Sprinkler
5B. Landfills
5C. Hydropneumatic method
5D. Manhole

 $(2\frac{1}{2} \text{ marks} \times 4 = 10 \text{ marks})$

- 6A. What are the three different types of traps used in home drainage system and Why? Explain along with sketches.
6B. What are the key requirements of a good trap?

 $((2 \text{ marks} \times 3) + 4 = 10 \text{ marks})$ 