Reg. No.			7.5		

MANIPAL UNIVERSITY

THIRD SEMESTER B. ARCH. DEGREE EXAMINATION - NOVEMBER 2015

SUBJECT: ARC 211 - BUILDING SERVICES I (2010 SCHEME)

Saturday, November 28, 2015

Time: 10:00 - 13:00 Hrs.

Max. Marks: 50

- Answer any FIVE questions.
- Support the answers with neat sketches.
- 1. Explain the different sources of water. Mention rate of demand for various uses. Mention general standards prescribed for each use.

(10 marks)

2. Explain the types of sewerage and Patterns of refuse collection.

(10 marks)

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

(5+5 = 10 marks)

- 4. Write notes on the following:
- 4A. Types of fire
- 4B. Suppression agents
- 4C. Suppression systems

(3+3+4 = 10 marks)

- 5A. Explain single stack system of plumbing.
- 5B. Explain working of septic tank with the help of sketches.

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

- 6A. What is rain water harvesting?
- 6B. With a neat sketch explain the various components of rainwater harvesting.

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

