

MANIPAL UNIVERSITY**THIRD SEMESTER B. ARCH. DEGREE EXAMINATION – FEBRUARY 2016****SUBJECT: ARC 207 - BUILDING SERVICES II
(2014 SCHEME)**

Tuesday, February 16, 2016

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

- ✍ Answer any FIVE questions.
✍ Assume suitable data wherever necessary.

- 1A. What are the factors considered to calculate illuminance of a room?
1B. Explain the steps involved in lumen method – lighting calculations.

(3+7 = 10 marks)

- 2A. What is a transformer?
2B. What is earthing?
2C. Explain the two methods of earthing with neat sketches.

(2+2+6 = 10 marks)

- 3A. Explain with neat sketch the grid / interconnected distribution system of transmission of electricity.
3B. Explain with neat sketch pipe earthing method.

(5+5 = 10 marks)

- 4A. Which type hoist mechanism would be favorable in the following elevators:

- i) Car Elevators
- ii) Construction site Elevators
- iii) Sky scrapers' passenger Elevators
- iv) Elevator for a Small residence

- 4B. What are the various design consideration, while locating and selecting elevators and escalators in a shopping mall?

(2+8 = 10 marks)

- 5A. Explain the cleat and conduit wiring system.
5B. Explain with a neat diagram, the working of neon lamps.
5C. With neat sketches explain any two types of luminaires.

(3+3+4 = 10 marks)

- 6A. What are the types of fire extinguishers? With neat sketch explain any one in detail.
6B. What is fire resistance rating?
6C. What is Automatic Fire Detection and Alarm System?

(6+2+2 = 10 marks)

