


MANIPAL UNIVERSITY**THIRD SEMESTER B. ARCH. DEGREE EXAMINATION – NOVEMBER 2017****SUBJECT: ARC-14-207 - BUILDING SERVICES II
(2014/2010 SCHEME)**

Thursday, November 09, 2017

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

 **Answer any FIVE questions.**

 **Support your answers with neat sketches wherever it is required.**

1A. Explain in detail Lumen Method of Lighting Design.

1B. List down the factors to be considered for calculating illuminance level in a room.

(6+4 = 10 marks)

2A. Discuss Fuse and Circuit Breakers with neat sketches.

2B. Discuss in detail about the factors affecting the choice of electric wiring.

(5+5 = 10 marks)

3A. What is Earthing? What is its basic function? List out the basic components of earthing.

3B. Differentiate between Plate Earthing and Pipe Earthing with neat sketches.

(4+6 = 10 marks)

4A. With reference to planning and design of escalators describe the Speed, Step width and Inclination.

4B. Explain and sketch plan and section of the Dumb Waiter recommended as per NBC.

(6+4 = 10 marks)

5A. What are the different types of fire extinguishers? Explain any two.

5B. Explain the passive firefighting to be incorporated into the building with neat sketches.

(5+5 = 10 marks)

6. **Write short notes on any FOUR of the following:**

6A. Handling capacity of elevators

6B. Interconnected Distribution System

6C. Generation and Power transmission of Electricity

6D. Advantage of CFL lamps over Incandescent lamps

6E. Smoke detectors

(2½ marks × 4 = 10 marks)

