

MANIPAL UNIVERSITY**FOURTH SEMESTER B. ARCH. DEGREE EXAMINATION – MAY 2016****SUBJECT: BUILDING SERVICES II (ARC-212)
(2010 SHEME)**

Tuesday, May 24, 2016

Time: 10:00 - 13:00 Hrs.

Max. Marks: 50

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

- 1A. Discuss the various electricity distribution methods in towns and cities.
1B. Discuss the typical power distribution system in a residential Building.

(6+4 = 10 marks)

- 2A. Explain the various systems of electric wiring in a building with sketches.
2B. Explain the methods of protecting the electric installation against short circuit and earth fault.

(5+5 = 10 marks)

- 3A. Explain the classification of lamps, explain two in detail.
3B. Discuss the methods and requirements for a good illumination design.

(5+5 = 10 marks)

4. Discuss in detail with neat sketches and sections the mechanized transport systems of a conventional elevators. Discuss the fire safety considerations in elevator design.

(7+3 = 10 marks)

5. **Write short notes on:**

- 5A. Energy efficiency in lighting
5B. Substation and Transformer
5C. Safety features in escalator design
5D. Units of Photometrics

(2½ marks × 4 = 10 marks)

6. Discuss in detail the functioning of a conventional escalator and draw its section and its components.

(10 marks)

