

MANIPAL ACADEMY OF HIGHER EDUCATION
THIRD SEMESTER B. ARCH. DEGREE EXAMINATION – JAN/FEB 2018
SUBJECT: ARC-14-207 - BUILDING SERVICES II
(2014 SCHEME)

Thursday, January 25, 2018

Time: 10:00 – 13:00 Hrs.

Max. Marks: 50

✍ Answer any FIVE questions.

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

1A. Sketch and explain the following types of lamps along with their advantage and disadvantages.

- i) Incandescent lamps
- ii) Fluorescent lamps
- iii) Compact fluorescent lamp (CFL)

1B. Briefly describe Correlated colour temperature and Colour Rendering Index.

(6+4 = 10 marks)

2A. Explain in detail about the electric power supply system in India.

2B. How the 3 phase electric distribution system differs from single phase electric distribution system?

(4+6 = 10 marks)

3A. List out the different systems of distribution of electricity for a large building.

3B. Discuss in detail about Ring or Loop distribution system with neat sketch with its merits and demerits.

(3+7 = 10 marks)

4A. Explain with the help of sketches any three different typical layout options of escalators.

4B. List the different types of lifts classified according to their use. Describe briefly with sketches the hospital lift.

(6+4 = 10 marks)

5A. Explain with neat sketch automatic sprinkler system.

5B. Explain the wet riser system with a neat sectional detail.

5C. What are the recommendations for fire staircase as per NBC?

(3+4+3 = 10 marks)

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

- 6A. Luminous flux
- 6B. Raceways and Busways
- 6C. Sub-circuits
- 6D. Quality of service of lift
- 6E. Types of fire extinguishers

(2½ marks × 4 = 10 marks)

