

MANIPAL UNIVERSITY**FOURTH SEMESTER B. ARCH. DEGREE EXAMINATION – MAY 2017****SUBJECT: BUILDING SERVICES II (ARC-212)**
(2010 SCHEME)

Wednesday, May 03, 2017

Time: 10:00 - 13:00 Hrs.

Max. Marks: 50

 **Answer any FIVE questions.**

1A. Define the term luminaire. List any six different types of luminaires.

1B. Briefly describe the High Intensity Discharge (HID) lamps.

(5+5 = 10 marks)

2A. Describe the function of an electrical substation in a building and briefly explain each of its components.

2B. Explain earthing for a residential building.

(6+4 = 10 marks)

3A. List down the information that needs to be provided by the architect for inviting tender from lift installation companies.

3B. Explain the fire safety considerations in elevators.

(5+5 = 10 marks)

4A. Define an escalator. What are advantages of escalators in comparison with lifts?

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

(4+6 = 10 marks)

5. **Draw appropriate sketches of the following:**

5A. Ring or Loop electrical distribution System for large areas

5B. Power distribution system starting from generation until the end user

5C. Electrical service connection to a building by overhead cables

(10 marks)

6. **Write short notes on: (any FOUR)**

6A. Task lighting

6B. Passenger elevator

6C. CFL

6D. Colour Rendering Index

6E. Fuses

(2½ marks × 4 = 10 marks)

