Reg. No.

MANIPAL UNIVERSITY

THIRD SEMESTER B. ARCH. DEGREE EXAMINATION - NOVEMBER 2015

SUBJECT: ARC 207 - BUILDING SERVICES II (2014 SCHEME)

Tuesday, November 17, 2015

Time: 10:00 - 13:00 Hrs.

Max. Marks: 50

- Answer any FIVE questions.
- All questions carry equal weightage.
- Assume suitable data wherever necessary.
- 1A. What is quality lighting?
- 1B. Explain the layered lighting with examples.
- 1C. What is Color rendering?
- 1D. What is luminous flux and Illuminance?

(2+4+2+2 = 10 marks)

- 2A. In the context of electrical distribution over large areas explain with the help of sketches:
 - i) Radial Distribution System
 - ii) Interconnected Distribution System
- 2B. Explain the sub-circuits in electrical distribution system in a residential building.

(6+4 = 10 marks)

- 3A. With the help of a circuit diagram, explain the simple control circuit used in domestic installation.
- 3B. What is the necessity of earthing the electrical equipment?
- 3C. Give a cross-sectional detail of the earthing arrangement.

(5+2+3 = 10 marks)

- 4A. What are the various types of Elevators based on their hoist mechanism? Mention their uses.
- 4B. With the help of neat diagram explain the components and functioning of Escalators.

(4+6 = 10 marks)

- 5. Explain the following:
- 5A. Color temperature
- 5B. Room Cavity Ratio
- 5C. Task lighting
- 5D. Socket outlets
- 5E. Conduit wiring

 $(2 \text{ marks} \times 5 = 10 \text{ marks})$

- 6A. Explain with neat sketch the wet riser fire fighting system.
- 6B. Explain the active fire protection systems in a building.

(5+5 = 10 marks)

