

**MANIPAL UNIVERSITY****FOURTH SEMESTER B.A. (ID)/B.DES (ID) DEGREE EXAMINATION – MAY 2016****SUBJECT: BID 208 – BUILDING SERVICES II  
(2014 SCHEME)**

Monday, May 23, 2016

Time: 14:00 – 17:00 Hrs.

Max. Marks: 50

- ✍ **Answer any FIVE of the following.**  
✍ **Illustrate with neat sketches and examples wherever required.**

**1. Describe and give comparative analysis for:**

- 1A. Underground system of electrical power  
1B. Over head system of electrical power

(5+5 = 10 marks)

**2. Explain in brief the following system of communication.**

- a) PBX                      b) Facsimile                      c) Telephone                      d) PA System

(2½ marks × 4 = 10 marks)

**3. Explain with examples the importance of the following in building design:**

- 3A. Natural daylight  
3B. Artificial lighting

(5+5 = 10 marks)

**4. Enlist and explain the different types of elevators available in the market.**

(2+8 = 10 marks)

**5. Explain the terms:**

- 5A. Reverberation  
5B. Echo  
5C. Amplitude  
5D. Frequency  
5E. Wavelength

(2 marks × 5 = 10 marks)

**6. Write short notes on:**

- 6A. Advantages of escalators over other vertical circulation systems  
6B. Accent lighting with suitable examples

(5+5 = 10 marks)

