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**Fourth Semester B.Arch. Degree Examination, June/July 2017**  
**Building Services – II**

Time: 3 hrs.

Max. Marks:100

**Note:** 1. Answer any *FIVE* full questions, selecting atleast *TWO* from each part.  
2. Draw relevant sketches wherever necessary.

**PART – A**

- 1 a. Describe with a neat block diagram, how electricity is transmitted from generating station to the end user. (08 Marks)  
b. Define the terms:  
(i) Volt (ii) Ohm (iii) Voltage drop (iv) Current  
(v) Capacitance (vi) Insulator. (12 Marks)
- 2 a. What is a fuse? Describe in detail types of fuses. (10 Marks)  
b. Explain in detail overhead service connections to the building with neat sketches. (10 Marks)
- 3 Write short notes on :  
a. Transformer  
b. MCB  
c. Energy meter  
d. UG Cables (20 Marks)
- 4 Draw a single line plan of a two bedroom house and prepare the electrical layout using the standard symbol. Calculate the electrical load for the lighting of house. (20 Marks)

**PART – B**

- 5 a. Explain law of illumination. (08 Marks)  
b. Explain with neat sketches:  
(i) Reflectance (ii) Transmittance (iii) Refraction (12 Marks)
- 6 a. What is colour rendition? (05 Marks)  
b. With neat sketches explain methods of lighting. (15 Marks)
- 7 Write short notes on :  
a. Fluorescent lamp  
b. Halogen lamp  
c. Luminaries  
d. LEDs (20 Marks)
- 8 Explain the design consideration and methods of lighting for the following areas:  
a. Art gallery  
b. Coffee shop  
c. Kitchen platform  
d. Garden. (20 Marks)

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