

**B. ARCH.**  
**(SEM VI) THEORY EXAMINATION, 2017-2018**  
**ARCHITECTURAL SERVICES - II**

Time: 3 Hours

Total Marks: 50

Note:

- Read instructions carefully, attempt accordingly.
- All sections are compulsory.
- The sketches should be neatly labeled.

**SECTION – A**

**1. Attempt all questions. All questions carry equal marks (10 X 1= 10)**

- a. Cable
- b. Circuit Breaker
- c. Fiber Optics.
- d. Earth Electrode.
- e. Neutral Conductor
- f. Alternating Current
- g. luminous flux
- h. luminance
- i. Luminaries
- j. Series Circuit

**SECTION – B**

**2. Attempt any five questions. All questions carry equal marks. Write short notes on the following: (5X5=25)**

- a. Installation of PVC pipe wiring
- b. 3 phase, 4 Wire distribution system
- c. What is Illumination? Discuss various types of illumination schemes.
- d. Importance of Flood light in Architectural System
- e. Indirect and general diffusing lighting.
- f. Reflection and dispersion of light
- g. Luminous intensity and Illuminance
- h. What is the need for earthing of domestic fittings and appliances? How is it done?

**SECTION – C**

**3. Attempt any two questions. (1X 15= 15)**

- a. A hotel reception-cum-waiting hall of size 12.0Mt x 18.0Mt. is to be illuminated by lamps having lumen output of 2700 Lumens. The average illumination required at work place is 250 Lux. Calculate the number of lamps required to be fitted in it. Assuming the Coefficient of Utilization to be 0.8 and Maintenance Factor to be 0.7
- b. Draw a layout plan of a bed room 3.5Mt x 4.5Mt thereafter; suggest the location of various electrical fixtures and electronic equipment, in it. Finally, propose an electrical layout plan, using proper symbols and also write down various considerations you have made, while designing.
- c. Differentiate between the following. Attempt any two:
  - (a) Parallel circuit and Short circuit.
  - (b) Plate electrode and Pipe electrode.
  - (c) Rewireable type and cartridge type fuse.
  - (d) Joint box system of wiring and Loop – in system of wiring.