B. Arch. Part-II 4th Semester Examination, 2009

Electrical Services
(EE-401A)

Time : 2hours   Full Marks : 35

Answer Q.No.1 and and THREE from the rest.

1. a) Define the following terms:

    LUX, Luminous Intensity, MHCP, Fusing current

    b) Explain polar curve with necessary diagrams.

    c) What are the points that need to be earthed in an installation?

    d) What are the disadvantages of series connections in lighting circuits?

    [4+3+2+2]

2. a) With the help of a neat sketch, describe different parts of an underground cable and their functions.

    b) Describe plate earthing.   [4+4]

3. a) State will the help of diagrams the KBh 29/5 laws of illumination .

    b) With the help of a neat sketch describe a typical house wiring circuit.   [3+5]

4. a) What is loop in method of house wiring? Draw the circuit layout of a room that contains two lamps and one power socket outlet controlled by individual switch.

    b) Prepare a brief note on different types of lighting schemes.   [4+4]

5. a) Write a note on different types of lamps with their suitable application.

    b) The illumination at a point on a working plane directly below the lamp is to be 100 lumens/m². The lamp gives 256cp, uniformly below the horizontal plane. Determine the height at which the lamp is suspended. Also find the illumination at a point on the working plane 1.2 metres away from the vertical axis of the lamp.   [4+4]

6. a) Describe different methods of lighting calculation.

    b) With a neat sketch explain the construction and operation of a HRC fuse.

    [5+3]

— — —