

09ARC 4.3 – BUILDING SERVICES – II

Written by Administrator
Saturday, 31 October 2009 16:21 -

(ELECTRICAL SERVICES & ILLUMINATION)

CONTACT PERIODS : 4 (LECTURE) PER WEEK

DURATION OF EXAM : 3 HRS

EXAM MARKS: 100

PROGRESSIVE MARKS : 50

□

□

Objective:

□

To introduce students to electrical services and illumination and to sensitise them with respect to their integration into Architectural Design.

□

□

Outline:

□

Part – A

Importance of electrical services in buildings, introduction to commonly used terminology

Supply and distribution of electricity to buildings – substations (including – high tension panels, transformers, low tension panels, generators) and overhead versus underground distribution systems, panel boards etc.,

Internal supply and distribution – brief description of various cabling types, conduit, PVC casing and capping wiring systems;

Earthing and brief description of protective devices – fuses, MCB's, ELCB, etc.,

Electrical load estimation

09ARC 4.3 – BUILDING SERVICES – II

Written by Administrator
Saturday, 31 October 2009 16:21 -

Introduction to power and lighting circuits (Not to be asked in the exam)

Indian Electricity Rules-Relevant codes of Practice

Part-B

Quality and quantity of light;

Methods of lighting: ambient, task and accent lighting

Systems of luminaries: direct, indirect etc

Various types of electrical lamps – incandescent, fluorescent/CFL, HID's, neon lamps and their lighting characteristics

Design considerations for different types of occupancies and tasks

Preparation of a lighting and electrical scheme

09ARC 4.3 – BUILDING SERVICES – II

Written by Administrator
Saturday, 31 October 2009 16:21 -

References:

- 1) 'Electrical Technology' by H Cotton.

- 2) 'Electrical Wiring, Estimating & Costing' by L.Uppal.

- 3) 'Basic Electrical Engg' by Anwari.