

III B. Tech – I Semester
(20CE5402) FUNDAMENTALS OF BUILDING PLANNING

Int. Marks	Ext. Marks	Total Marks	L	T	P	C
30	70	100	3	-	-	3

Pre-Requisites:

Course Objectives:

- Initiating the student to different building bye-laws and regulations.
- Imparting the planning aspects of residential buildings and public buildings.
- Imparting the skills and methods of planning of various buildings.

Course outcome:

Upon successful completion of the course: The student can

1. implement various building by-laws.
2. plan residential buildings
3. plan public buildings
4. Understand the principles of building planning
5. Understand the principles of Town planning

UNIT- I: Building Byelaws and Regulations:

Introduction- terminology- objectives of Building byelaws- floor area ratio- floor space index- principles under laying building byelaws- classification of buildings- open space requirements – built up area limitations- height of buildings- wall thickness – lightening and ventilation requirements.

UNIT- II: Planning of Residential Buildings:

Minimum standards for various parts of buildings requirements of different rooms and their grouping- characteristics of various types of residential buildings and relationship between plan, elevation and forms and functions

UNIT- III: Planning of Public Buildings:

Planning of educational institutions, hospitals, dispensaries, office buildings, banks, industrial buildings, hotels and motels, buildings for recreation, Landscaping requirements.

UNIT- IV: Study of general principles of Planning:

Typical Building Byelaws as per National Building Code and General Development Control Regulation. Multistoried structure. Planning of Industrial Building. Preparing Working Drawings of Residential Buildings. Various types, Scale selection, Material description

UNIT-V: Town Planning

Elements of City Planning, Zoning and land use, Housing, Introduction to landscape architectural planning, Master plan, Town Center, Civic, centers, Shopping Center, Town Planning Schemes.

Text Books:

1. Planning, designing and Scheduling by Gurucharan Singh and Jagadish Singh
2. Building planning and drawing by M. Chakravarthi.

References:

1. Civil Engineering Drawing and House planning by B. P. Verma, Khanna publishers, New Delhi.
2. Civil Engineering Building practice by Suraj Singh: CBS Publications, New Delhi, and Chennai.
3. Sane, Y.S., Planning and Designing Building.
4. National Building Code of India, Indian Standard Institution (ISI), 2005, New Delhi.
5. BIS and IS Code.

Web Materials:

- <http://edudel.nic.in>
- <http://bis.org.in/other/quake.htm>
- http://www.vastu-design.com/india_homes.htm
- <http://www.thepeninsulaneighborhood.com/ThePlan.html>
- http://www.historytution.com/indus_valley_civilization/town_planning.html