

Design of Human Settlements

Objectives: The study aims at introducing students to the development of planning thought from that of historic to present age. It also gives emphasis on stressing broad principles of settlement in such period. The study of this subject continues with emphasis on planning philosophies and the student to carry out the further studies in the specialized field of Urban Planning.

Unit I: Man's role in designing and developing the towns and cities from ancient times through Medieval, Renaissance and Industrial revolution to present day development.

Unit II : Town planning in India, Pre-historic, Vedic, Pre- British and British Planning in India, Planning after independence.

Unit III: Pioneers and their works, Planning concepts of Patric Geddes, Ebenezer Howard, Abereronmbie, Le-corbusier, C. A. Parry, Clarence Stein, Doxiadis, Kevin Lynch, F.L. Wright, Lewis Mumford, Rob Krier and Victor Gruen.

Unit IV : Present concept of planning at various levels, Planning as a team work, Role of Architects/ Planners in a team , Importance and methodologies of surveys in the planning process, Factors governing the location and growth of towns.

Unit V: Understanding the process of development plan making, general ideas of implementation of such plans and planning agencies, study of planning legislation and administration, town and regional planning acts., M.R.T.P Act., Development control rules, zoning, density, height, FSI Structures, Role of local and planning authorities.

Unit VI : Introduction to the problem of urban and rural housing in India, Analysis of demand and supply, General study of Planning consideration of housing and area development and housing infrastructure such as utilities and services.

Sessional works : Notes and Seminar of above topics, Critical appraisal of existing proposed housing schemes, planning exercise of residential community.

Reference books :

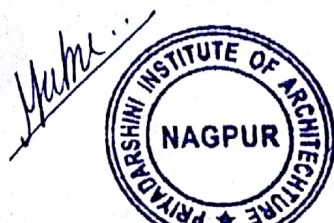
Fundamentals of Town Planning by G.K.Hiraskar, Danpatrai & Sons.

Town Planning by S.C.Rangwala and K.S.Rangwala

Town Planning by Abir Bandhopadhaya, Books and Allied (P) Ltd.,

Urban Pattern City Planning and Design by Gallion and Eisher.

Sessional work :- Sketches, assignments & tests.



Human Factor Design

SYLLABUS

PGID203T Human Factor Design

Objective: To expose the students to the various aspects of Industrial Design so as to develop new products considering ergonomics, cognitive response and other human factors.

On completion of the course, the students will be able to:

- Understand the importance of ergonomics in the design of new products.
- Learn the effect of anthropometry, physiology, biomechanics, etc. on the design and development of new products.
- Understand the effects of other human factors.
- Gain knowledge about controls and display elements.

UNIT I: Human being in manmade world, gross human anatomy, static and dynamic anthropometry, muscles and work physiology, biomechanics, environmental condition.

UNIT II: Function of control and display elements, dials, knobs, push buttons, handles and electronic displays.

UNIT III: Investigations and study of visual, functional and ergonomical requirements of control and display elements, legibility of display elements, character of different typefaces and their readability.

UNIT IV: Printing and transfer techniques, product graphics, study of different textures and patterns, area, volume and proportion, order and system.

UNIT V: Individually planned design projects involving research, analysis and design of control and display panels.

Texts/References:

W.E. Woodson, Human Engineering Guide for equipment Designers, University of California, Uerkley, 1000. Henry Dreyfuss, Measure of Man, Whitney N.Y., 1960 Crosby, Fletchers & Forbes, A Sign Systems Manual, Studio Vista, London, 1970 W.H. Mayall, Machines & Perception in Industrial Design, Studio Vista, N.Y., 1968.

