

COURSE TITLE : HABITAT TECHNOLOGY
COURSE CODE : 5003
COURSE CATEGORY : E
PERIODS/WEEK : 4
PERIODS/ SEMESTER : 72
CREDITS : 4

TIME SCHEDULE

MODULE	TOPIC	PERIODS
I	Introduction, Climatology, Sustainable Development, Environmental Management	18
II	Interior Decoration, Principles, Decorative Materials, Structural Elements, Application	18
III	Landscape Architecture, Evolution – History, Types of Gardens, Components of Landscape design, Soft and Hard materials	18
IV	Earthquake resisting techniques for buildings, Control of Soil Erosion, Land Development, Slums and Dearance	18
	TOTAL	72

OBJECTIVES

MODULE – I

- 1.1.0 Understand Climatic factors, climate and weather, Sustainable Development and Environmental Management.
- 1.1.1 Understand solar radiation, quantity and quality
- 1.1.2 Outline Climatic factors.
- 1.1.3 Understand Earth's Thermal balance
- 1.1.4 Understand Winds & Types of Wind
- 1.1.5 Understand the Characteristics of Wind force and speed
- 1.1.6 Outline Micro and Macro Climate.
- 1.1.7 Understand factor affecting climate
- 1.1.8 Outline the efforts for Sustainable Development.
- 1.1.9 Outline the efforts for protecting Earth and Atmosphere

MODULE - II

- 2.1.0 Study the characteristics of Indoor Space.
- 2.1.1 Outline Shape Enclosures, Interior Planning.
- 2.1.2 Understand Classic and Modern Decorative materials.
- 2.1.3 Understand the Colour and Finish / Texture Properties.
- 2.1.4 Understand various Interior Structure elements.

MODULE– III

- 3.1.1 Understand the importance and history of Landscape Architecture.
- 3.1.2 Understand different types and styles of Garden.
- 3.1.3 Understand the components of Landscape design.
- 3.1.4 Understand the Soft and Hard (Pre fabricated) Components.

MODULE – IV

- 4.1.0 Describe the Earthquake resisting techniques.
- 4.1.1 Understand the Codal provisions and practices for resisting Earthquake(for

buildings).

4.1.2 Understand the practices for controlling Soil Erosion.

4.1.3 Outline the techniques of Land Development.

4.1.4 Outline the characteristics of slums and its clearance.

COURSE CONTENT

MODULE – I

Introduction : Climatology – Definition – Climate and Weather – Solar Radiation – Quantity and Quality – Earth's Thermal balance – Winds – Types of Wind – Characteristics of Wind force and speed.

Site Climate / Micro Climate – Local factors, temperature and humidity – Air movement – Vegetation – Urban Climate – Site Climate Data – Macro Climate.

Sustainable Development – Definition – Global efforts for Sustainable Development – Sustainable Agriculture and Rural Development – Protection of Atmosphere, Air, Water and Earth, Environmental Management.

MODULE – II

Introduction : Interior Decoration – Definition – Characteristics of Interior Space – Perception – Size – Volume – Proportion and shape of Enclosures – Ideal Space Proportion – Interior Planning.

Principles of Interior design – Classic and Modern Decorative materials – Colours and Finish – Properties of Colours – Different finishing Textures – Fixtures in relation to the background – Finish of various structural elements – Ceiling – Floor – Walls.

MODULE – III

Landscape Architecture : Definition – Importance – Brief history – Formal and Informal Gardens – Understanding the types, styles and features of Gardens – Mughal Gardens – English Gardens – French Gardens – Japanese Gardens.

Components of Landscape design – Soft and Hard elements – Plants and other decorative vegetation – Hard elements like Ferrocement, Paving blocks, Stone items – Artificially moulded elements.

MODULE – IV

Earthquake – Terminology – Earthquake zones in India – Earthquake resisting technologies - Codal provisions and practices for resistance (for buildings).

Soil Erosion – effects and remedies.

Land development – Meaning and techniques

Slum – Definition – Causes of Slums – Characteristics of Slums – Effect of Slum – Agencies and Methods of Slum clearance.

REFERENCES

1. Housing, Climate and Comfort – Martin Evans(The Architectural Press, London)
2. Environmental Management – S. Vigneswaran, M. Sundara & D. S. Choudhary
3. Dynamics of Structures
4. Theory and Applications to Earthquake Engineering(Iiird Edition) – Anil K Chopra Publisher : Pearson Education
5. Understanding Environmental Pollution(Iind Edition) – Marquita K Hiu Publisher : Cambridge University Press
6. Time Saver Standards In Interior Design
7. Time Saver Standards In Landscape Architecture.

