## **LESSON PLAN**

NAME OF THE FACULTY : SH. SAHIL PAHAL

DISCIPLINE : ARCHITECTURAL ASSISTANTSHIP

SEMESTER : 3<sup>rd</sup>

SUBJECT : CLIMATOLOGY

LESSON PLAN DURATION : 15 WEEKS

WORK LOAD PER WEEK : 03

WEEK	LECTURE	THEORY
WEEK	DAY	TOPIC
1ST	1.	General Introduction: Introduction to climatology
	2.	Movement of earth around sun,
	3.	Elements of climate (Wind, temp, humidity,).
2ND	4.	Elements of climate (precipitation, pressure).
	5.	Different Climatic Zones.
	6.	Orientation of building with respect to above mentioned elements of climate
3RD	7.	Effect of climate on man and shelter.
	8.	Relation of Climate and comfort: Macro-micro climatic effects
	9.	Difference between Climate and comfort
4TH	10.	Difference between Macro-micro climatic effects
	11.	Concept of comfort zone and bio-climatic chart
	12.	Concept of comfort zone and bio-climatic chart
5TH	13.	Climatic evaluation by season
	14.	Climatic evaluation by season
	15.	IST SESSIONAL TEST
6TH	16.	Sun Control and shading devices (without calculations)

	17.	Solar Chart (sun path diagram)
	18.	Orientation for sun
7TH	19.	Internal and external sun protection devices
	20.	Internal and external sun protection devices
	21.	Natural lighting
8 <sup>TH</sup>	22.	Introduction of Solar Passive Design
	23.	Objectives of Solar Passive Design
	24.	Passive solar heating and cooling
9 <sup>TH</sup>	25.	Wind control: Orientation with respect to wind
	26.	Orientation with respect to wind
	27.	Wind protection devices
10T H	28.	Use of building materials with respect to climate: Concrete, Brick, Glass
	29.	Use of building materials with respect to climate: Plastics, Stone, Insulating material
	30.	2ND SESSIONAL TEST
11 <sup>T</sup> H	31.	Environment and Ecology:
	32.	Environment and Ecology
	33.	Basic elements of ecology
12 <sup>T</sup> H	34.	Concepts of natural cycles in Eco-system
	35.	Source of noise and air pollution
	36.	Noise and air pollution effects
13 <sup>T</sup>	37.	Noise and air pollution controls

Н	38.	Use of landscape elements
	39.	Use of landscape elements for micro and macro climate control
14 <sup>T</sup>	40.	Use of landscape elements for micro and macro climate control
Н	41.	Introduction to climate change
	42.	Principle causes of climate change
15 <sup>T</sup>	43.	Climate change: effects- methods of mitigating climate change
Н	44.	Climate change: effects- methods of mitigating climate change
	45.	3RD SESSIONAL TEST