Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

DIPLOMA IN ARCHITECTURE - SEMESTER - V • EXAMINATION - WINTER 2015

•		ode: 3356204 Date: 14/12/2 ame: ENVIRONMENT SCIENCE AND ECOLOGY	015
•	: 10:3	30 AM TO 12:30 PM Total Marks: 5	50
1. 2. 3.	Atter Mak Figur	mpt all questions. e Suitable assumptions wherever necessary. res to the right indicate full marks. plement your answer with neat sketches wherever necessary.	
Q.1	(a)	Explain the factors that affect Site Climate, with neat sketches	05
	(b)	What is Micro and Macro Climate	05
Q.2	(a)	Explain how the size, position and control of opening affect ventilation.	05
	(b)	Explain the concept of Cross Ventillation.	05
Q.3	(a)	Explain with neat sketches and examples: Design criteria for Hot Dry Climates	10
	(a)	OR Explain with neat sketches and examples: Design criteria for Warm Humid Climates	10
Q. 4	(a)	Explain the concept of Sun Path Diagram, and how it is used in designing built forms as per climate.	05
	(b)	Explain the concept of Day Light Factor	05
Q. 5	(a)	Explain Heat Exchange process of the building and periodic heat flow, with relevant sketches.	10
Q6.	(a)	Neatly sketch the following: (Any 5)	10
	1 2 3 4 5 6 7	Cavity Wall Types of reflection surfaces Tilt of the earth Psychometric chart Climate graph Vertical and Horizontal shading devices Sources of light in built space	

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