Seat No.:	Enrolment No

## GUJARAT TECHNOLOGICAL UNIVERSITY B.ARCH - SEMESTER- III • EXAMINATION - WINTER • 2014

Subject Code: 1035005 Subject Name: Environmental Science Time: 2:30 PM to 4:30 PM Instructions:  1. Attempt any five questions.		Date: 01-01-2015  Total Marks: 50		
Q.1	(a) 1 2 3 4	Define following with appropriate sketches. (Any 5) Solar Radiation Heat Effective Temperature Conduction		05
	5 6 ( <b>b</b> )	Reflection Cavity wall Describe in detail the factors affecting the site climate.		05
Q.2	(a) (b) 1 2	Explain the process of heat exchange in the building, with appr Explain the following with sketches De-humidification Bioclimatic Chart	opriate sketches.	05 05
Q.3	(a) (b)	What design criteria should be kept in mind while designic climate? Explain active and passive thermal control.	ng in composite	05 05
Q.4	(a) (b)	How size, positioning and control of opening effect ventilation Explain dual nature of light. Explain different types of reflection		05 05
Q.5	(a) (b)	Explain the concept of day light factor. How day light should hot dry climate? Explain the working of Sun path diagram, with appropriate ske		05 05
Q.6	(a) (b)	Differentiate between hot-dry climate and warm humid climate Explain different types of climates. Explain micro and macro climate		03 07
Q.7	(a) (b)	Explain the concept of periodic heat flow. Show time lag in sar Explain the concept of orientation of building and cross ventila		05 05

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