TED (10) 5014 Signature .

(Revision 2010) Reg. No.....

SIXTH SEMESTER DIPLOMA EXAMINATION IN ARCHITECTURE
MARCH 2013

SUSTAINABLE ARCHITECTURE

[Total Marks: 100] [Time: 3 Hours]

PART- A
(Maximum Marks: 10)

Marks

I. Answer the following questions in one or two sentences. Each question carries 2 marks.

1. Name the Indian rating systems for sustainability.
2. Define ecosystem.
3. What is thermal inertia?
4. Which type of current generated by photo-voltaic cells?
5. Name the process that breaks down used items into raw materials to make materials. (5x 2=10)

PART – B
(Maximum Marks: 30)

II. Answer any five of the following questions. Each question carries 6 marks.

1. Explain the term environmental degradation.
2. Write any one case study for sustainable development.
3. How is green building related to smart growth and sustainable development?
4. Describe the Energy efficiency in sustainable architecture.
5. Write short note on Vernacular design.
6. What are the benefits of Recycling?
7. Write down the Indian rating Certification Levels for sustainability. (5x6=30)

PART - C
(Maximum Marks: 60)
(Answer one full question from each unit. Each question carries 15 marks)

UNIT-I

III. a. Define bioregionalism and its perspective. (8)
b. Write the Components of Green Building. (7)

OR

IV. a. Write the main principles of energy conversation. (8)
b. What is LEED (US) rating system? Write down the six sections by which the system is composed. (7)

UNIT-II

V.	a.	Write down the principles of sustainable design? Explain briefly.	(8)
	b.	What are the phases of development in building?	(7)

OR

VI	a.	Explain the sustainable approach to site selection and planning.	(8)
	b.	List and describe the sustainable design principles.	(7)

UNIT – III

VII.	a.	Write the Sustainable materials used for finishing's and furnishing in Green Building as per LEED rating system.	(8)
	b.	Explain the Solar water heaters.	(7)

OR

VIII.	a.	Explain how to improve energy efficiency in residential building.	(8)
	b.	List the commonly used the Sustainable building materials.	(7)

UNIT – IV

IX.	a.	Explain the sustainability on post-building phase.	(8)
	b.	Write short notes on Waste.	(7)

OR

X.	a.	How to reduce water consumption?	(8)
	b.	Discuss on How to Reduce and Reuse?	(7)