

SIXTH SEMESTER DIPLOMA EXAMINATION IN ARCHITECTURE - OCTOBER 2013

SUSTAINABLE ARCHITECTURE

Maximum Marks : 100

Time : 3 Hrs

PART-A

[Maximum marks: 10]

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

Marks

- 1 Name the Japanese rating systems for sustainability?
- 2 Define the term sustainable design?
- 3 What is earth sheltering?
- 4 Define the term demolition?
- 5 Name the power generation using solar panels?

[5x2 =10]

PART - B

[maximum marks : 30]

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

- 1 Describe the effects of climate change and temperature in water resource?
- 2 Explain the term Energy efficiency
- 3 What is meant by sustainable development?
- 4 Write the Benefits of Reducing and Reusing?
- 5 What are the economic benefits of green or sustainable building and development?
- 6 Discuss the LEED(US) rating System?
- 7 Explain the term recycling?

[5x6=30]

PART - C

[maximum marks : 60]

Answer one full question from each unit. Each question carries 15 marks

UNIT - I

- III a List the general principles of energy conservation? [8]
b Write briefly primary rating systems in India [7]

OR

- IV a Explain how do buildings affect climate change? [8]
b What makes a building "green"? [7]

UNIT II

- V a Explain how to maintain economy resources achieving Sustainable Design? [8]
b What are the points to be considered at the time of Site Selection and Site Planning in sustainable design? [7]

OR

- VI a What are the economic benefits of sustainable building and development [8]
b Differentiate between sustainable design and sustainable development? [7]

UNIT III

- VII a Name any ten sustainable materials [8]
b Explain photovoltaic power generation? [7]

OR

- VIII a What are the techniques adopted in sustainable construction? [8]
b Write short note on vernacular design [7]

UNIT - IV

- IX a Discuss the demolition and recycling of buildings and their materials [8]
b Write any five Ideas on how to reduce and reuse? [7]

OR

- X a Discuss the waste prevention strategies in general? [8]
b What are the Benefits of Recycling? [7]
