No. of Printed Pages : 2 + Drawing Sheet

BARE-077

00901

BACHELOR OF ARCHITECTURE (B. ARCH)

Term-End Examination

December, 2013

BARE-077 : GREEN ARCHITECTURE AND ENVIRONMENTAL PLANNING (ELECTIVE - 2)

Time : 3 hours *Maximum Marks : 70*

Note : (i) *Answer **five** questions*

(ii) *Question No. **1** is **compulsory.***

(iii) *Answer **any two** from Part -B and answer **any two** from Part-C*

PART - A
(Compulsory)

1. Explain in brief ***any five*** from the following : **5x2=10**

(a) Visible Light Transmittance (VLT)

(b) Solar Heat Gain Co-efficient (SHGC)

(c) Building Envelope

(d) Kyoto Protocol

(e) Photosynthesis

(f) U - Factor

(g) Trombe Wall

PART-B
(Answer *any two*)

2. (a) Explain ten steps of site planning procedure. **10**

(b) Explain with a flowchart, the functional elements of a municipal solid waste management system. **5**

3. (a) What do you understand by 'Global Warming' ? How is 'green house' effect responsible for 'Global Warming' ? Name and briefly describe any five green house gases. 10

(b) What are the supplementary informations to be included on site analysis map ? 5

4. (a) Explain with a check list the parameters to be considered for Environmental Impact Assessment (EIA) study for comprehensive planning. 10

(b) Environmental planning is based on four fundamental principles, describe them. 5

PART-C

(Answer *any two*)

5. (a) What is a 'green building' ? 5

(b) Describe in detail some of the passive design methodologies which have been adopted for energy efficiency in buildings. 10

6. (a) List out the various areas of water usage in a residential building and explain the water conservation methods you would adopt in the above mentioned areas. 10

(b) How can heat island effects be reduced using appropriate technology for the roof of the building ? 5

7. In the context of green buildings; what are the aspects one would ensure : 15

(a) at construction stage

(b) for waste Management ? Discuss with the help of suitable examples.