

BACHELOR OF ARCHITECTURE (B.Arch.)

Term-End Examination

June, 2016

00138

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

Time : 3 hours

Maximum Marks : 70

Note : Question no. 1 is compulsory. Answer any four questions from the remaining. Supplement your answers with neat sketches.

1. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Cross Ventilation
 - (b) Daylight Factor
 - (c) Cavity Wall
 - (d) Stack Effect
 - (e) Embodied Energy
 - (f) Urban Heat Island

2. Explain any *two* of the following pairs of terms : 2×7=14

- (a) Global warming and Ozone depletion
- (b) Black water treatment and Grey water treatment
- (c) Solarium and Trombe wall
- (d) Passive heating system and Active heating system

3. How do you define LEED ? What are the salient features of LEED ? Explain one case study of a LEED rated building. 14

4. Discuss the various types of pollution and its causes. Explain 'Environmental Impact Assessment'. 14

5. What is Energy Conservation ? Describe the materials and construction techniques for achieving energy efficiency. Give one case study for an energy efficient building. Supplement your answer with neat sketches. 14

6. Discuss in detail the various policies of the Government of India, relating to hills and forest conservation. 14

7. Discuss in detail the various considerations in designing settlements with reference to ecological application. 14