

BACHELOR OF ARCHITECTURE (B. ARCH)

Term-End Examination

June, 2013

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

Time : 3 hours

Maximum Marks : 70

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- 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*
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PART - A

(Compulsory)

1. Explain in brief *any five* from the following : 5x2=10
- (a) Eutrophication
 - (b) Building Envelope
 - (c) Solarium
 - (d) Sullage
 - (e) Brown field sites
 - (f) Cavity wall
 - (g) Acid Rain

PART-B

(Answer any two)

2. (a) What are the environmental impacts of solid waste disposal on land ? How can they be prevented ? Draw a typical cross - section of a sanitary landfills with its salient aspects. 7+2
- (b) Explain briefly : 6
- (i) Additionality
 - (ii) Base Line
 - (iii) Bundling
3. (a) Explain Environmental Impact Assessment (EIA). What are the various stages involved in EIA ? 10
- (b) What is meant by carbon cycle ? How are human activities causing disturbances to it ? Explain with neat sketches. 5
4. (a) What is meant by green house gas ? Write short notes on any five green house gases. 10
- (b) What is a Project Design Document (PDD) ? Detail out the contents of PDD. 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.
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