

# END TERM EXAMINATION

SEVENTH SEMESTER [B.TECH] NOVEMBER-DECEMBER 2018

Paper Code: ETEN 419  
ETEN 421

Subject: Planning & Design of Green Buildings

Time : 3 Hours

Maximum Marks : 75

Note: Attempt five questions in all including Q. No. 1 which is compulsory.

- Q1. Write the short notes on the following: (5x5=25)
- CO<sub>2</sub> emission trade
  - Barriers of green building
  - Passive cooling
  - Pest control in green building
  - Blower Door test
- Q2. a) Give the brief note on the historical development of green building. (6)  
b) Elaborate the concept of green building. Give any one example of green building. (6.5)
- Q3. What is GRIHA, LEED & IGBC? Explain LEED rating system in detail. (12.5)
- Q4. Discuss the concept and principle of Earth Air Tunnel System in detail. Also indicate the importance parameters that impact the performance of the Earth Air Tunnel System. (12.5)
- Q5. What are the problems associated with selection of inappropriate building materials? Also explain about the materials and furnishings used in the construction of green buildings. (12.5)
- Q6. What are the different type of waste generated during the entire life cycle of conventional building and how it can be managed in green building? (12.5)
- Q7. How following features helpful in designing energy efficient building? (12.5)
- Orientation of building
  - Site selection and development
  - Building envelopes
- Q8. What are the source of air and noise pollution during construction and demolition activities and also discuss the guidelines to reduce the air and noise pollution during the same. (12.5)
- Q9. How the water can be conserved and water efficiency of green building can be increased during the construction and operation phase of green building. (12.5)

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