

Total No. of Questions : 9]

SEAT No. :

**P3874**

**[5561]-527**

[Total No. of Pages : 2

**B.E. (Civil Engineering)**  
**GREEN BUILDING TECHNOLOGY**  
**(2015 Course) (Semester - II) (End Semester) (Elective - IV)**  
**(Open Elective) (401010B)**

*Time : 2½ Hours]*

*[Max. Marks : 70*

*Instructions to the candidates:*

- 1) *Answer any 7 questions*
- 2) *Figures to the right indicate full marks.*
- 3) *Your answers will be valued as a whole.*
- 4) *Assume suitable data, if necessary.*

- Q1)** a) Enlist the Eco Friendly building materials and give their advantages. [6]  
b) Discuss in details about Resource Economics. [4]
- Q2)** a) What is Sustainable Site planning? Explain in details. [6]  
b) What are Thermal comfort indices? Discuss. [4]
- Q3)** a) Differentiate with example the active and passive architecture. [6]  
b) Discuss about Climate Responsive Architecture. [4]
- Q4)** a) Discuss about Thermal comfort indices. [5]  
b) What is mechanical ventilation? Give its merits and demerits. [5]
- Q5)** a) Discuss the followings [6]  
i) Life Cycle assessment of materials  
ii) Energy Management  
b) Explain in short about Environmental Impact Assessment. [4]

*P.T.O.*

- Q6)** a) What is mean by embodied energy of construction materials? [5]  
b) Give the procedure for Energy Audit. [5]
- Q7)** a) Give note on the followings [6]  
i) Water Conservation  
ii) Photovoltaic Cells  
iii) Biogas plant  
b) Discuss in detail the orientation aspects in site planning. [4]
- Q8)** a) What is clean development mechanism? [4]  
b) Discuss how the Kyoto protocol is beneficial for sustainable environment. [6]
- Q9)** a) Explain how conservation of energy in building is useful? [4]  
b) Discuss the following in detail [6]  
i) LEED India.  
ii) CASBEE.

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