

Total No. of Questions :8]

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**MVCT - 205**

**M.E./M.Tech., II Semester**

Examination, June 2016

**Appropriate Technology And Energy Conservation**

*Time : Three Hours*

*Maximum Marks : 70*

*Note : Attempt any five questions. All questions carry equal marks.*

1. Explain fundamental aspects of appropriate technology. Is there a need for appropriate technology as a separate concept of technology? 14
2. Define "Sustainable Development". What is the role of appropriate technology in "Sustainable Development"? 14
3. Using appropriate technology give the compact and simple waste water disposal system for rural areas. 14
4. Explain following related to appropriate technology : 14
  - a) Planning of rural roads.
  - b) Design aspects of rural roads.
  - c) Drainage problems of rural roads.
5. Write a review of global situation of Energy production, Distribution and Utilization. 14

6. Enlist renewable and non-renewable sources of energy. What are present energy trends? 14
7. Write a review on possibilities and adoptability of : 14
  - a) Solar energy
  - b) Wind energy
  - c) Tidal energy
8. Write short notes on any four of the following :  $4 \times 3\frac{1}{2} = 14$ 
  - a) Factors affecting energy budget in buildings
  - b) Design of buildings for minimising energy
  - c) Infiltration galleries
  - d) Maintenance of rural roads
  - e) Bio-gas plant
  - f) Low energy materials

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