

**II B.Tech II Semester Supplementary Examinations,
November/December 2005
ENERGY ENGINEERING
(Chemical Engineering)**

Time: 3 hours

Max Marks: 80

**Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Compare and contrast dry process and wet process for coal washing.
(b) Differentiate in-situ theory and drift theory supporting origin of coal. [8+8]
2. (a) What is vis-breaking? Describe the process of vis breaking?
(b) Write about the various catalyst systems practiced in catalytic cracking?[8+8]
3. (a) Define aniline point.
(b) Explain how it is measured for an oil sample.
(c) Give its significance with respect to diesel.
[4+6+6]
4. What is a solar pond? Describe a non-convective solar pond with a good schematic.
Explain the principle of operation. Give applications of solar ponds. [16]
5. (a) Give the relative merits and demerits of Tidal power.
(b) State the present status of tidal power plants in India [8+8]
6. Write briefly about energy from windmill storage. [16]
7. Explain basic components of a wind energy conversion systems with a neat schematic diagram. [16]
8. How do you dispose coal wastes, petroleum wastes and hospital waste? [16]
