

II B.Tech II Semester Supplementary Examinations, April/May 2005
ENERGY ENGINEERING
(Chemical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Discuss the salient points in transportation of coal from pit-head to the point of utilization.
(b) What is the scope for future development of coal industry.
2. (a) Write about the main products of petroleum giving their applications.
(b) Describe with a neat diagram, two stage distillation of petroleum.
3. (a) With reference to fuel oils, write the relationship between API gravity and calorific value.
(b) Define viscosity index. Give its physical significance with respect to application point of view of a lube oil.
(c) What is boiling range? Give the boiling ranges of any two petroleum fractions.
4. (a) What are the advantages and disadvantages of concentrating collectors over flat plate type collectors?
(b) Write about the selective absorber coatings used to reduce thermal losses from the absorber plate of a solar heating panel.
5. Write in detail the merits and demerits of wind energy.
6. Explain the significance and applications of fuel cell.
7. Explain the various constructions details of water storage system.
8. Discuss the municipal solid waste management. Stress the importance of the processes.
