

Department of Chemical Engineering

End Sem. Exam. (December 6, 2006)

CH-008: Chemical Technology – II

Time: 3 Hr.

Attempt All Questions

Max Marks: 60

1. What is crude oil? Name feed and various products of vacuum distillation unit. What are °API, Aniline point, Smoke point, Diesel index, and Octane number? (1-4+5)
2. What is coal and how it is classified? What is destructive distillation of coal? With the help of a neat diagram explain and justify various processes involved in destructive distillation of coal. (2-2+6)
3. What are black liquor and white liquor? What do you understand by the terms Pulping and Bleaching? Using a neat flow diagram explain manufacturing of paper. Explain importance of various rollers used. (2-2-4+2)
4. (a) What is vegetable oil? Name two vegetable oils that are not edible. (2-2)
(b) What is hydrogenation of oil? Explain the process with the help of a neat diagram and chemical reactions involved. (2-5)
5. What is "sugar free sugar"? What is the difference between carbohydrate and hydrocarbon? Name three byproducts of sugar industry and explain their uses. (2-2+6)
6. Write short note on any three of the following (3+3-3)
 - (a) Phthalic Anhydride
 - (b) DDT
 - (c) TNT
 - (d) Natural Rubber
 - (e) PVC
 - (f) Nylon