Applied Mathematics - III
5914-08.
9/1/09.

RC-8780

(REVISED COURSE)

(3 Hours) [Total Marks : 100

B.E.(Chemical) (Sem.VII) (Rev.) Exam. May, 2008
Petrochemical & Refining Tech./CO-3517

2788-08 9/6/2008

(REVISED COURSE)

(3 Hours) elec - II - IV [Total Marks : 100

: (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions out of remaining **six** questions.
(3) **Figures** to the **right** indicate **full** marks.
(4) **Neat** diagrams must be drown wherever **necessary**.

(a) Give brief ideas about ASTM distillation and TBP distillation. Specify the boiling ranges of the fractions obtained from VDU. **10**
(b) List the general methods for Dehydration of crude. Explain Electric desalter method in detail. **10**

(a) Discuss in brief the application of phenol extraction process for lubricating oil. Why phenol extraction cannot be carried out at a temperature less than 50°C. ? What are the factors based on which the selection of a solvent is done. (For the extraction of lubricating oil) **10**
(b) Discuss the methods available for the Gasoline Treatment . Why meticulous balance of TEL is added for the treatment? Explain copper chloride process in detail. **10**

(a) Explain catalytic cracking process in detail **10**
(b) Why isomerisation is carried out? List various isomerisation processes. Write in detail about aluminum Chloride isomerisation process. **10**

(a) Give the composition of Asphalte. What is the action of heat on Asphalt ? Explain air blowing of bitumen process with proper Flow diagram. **10**
(b) Distinguish between (i) U. O. P Characterization factor and Correlation Index (ii) EFV curve and TBP distillation. **10**

a) Write in Detail the process of visbreaking giving operation, conditions and neat Flow Diagram. **10**
b) Define and discuss, importance of following : (i) Flash point and fire point (ii) smoke point and pour point. **10**

) Explain propane Dew axing process in detail with the diagram. **10**
) Blending, is an important operations in refinery, justify the statement. How effective blends can be produced ? Explain briefly about Gasoline Blending. **10**

) Why Up gradation is required in petroleum industries ? Explain any one Up gradation technique with the examples. **10**
) Explain what do you understand by Desalting process ? Explain any one Desalting process in Detail. **10**