

24/12/08

(OLD COURSE)  
(3 Hours)RC-7346  
[Total Marks : 100]

131 4

- (1) Question No. 1 is compulsory.  
 (2) Attempt any four questions out of remaining six questions.  
 (3) Assume suitable data wherever necessary.

B.E. Chemical (Sem III) (REV Dec'08)

Tech. of Petrochemical &amp; Refining Tech.

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En. 5719-08.

24/12/08

(REVISED COURSE)

(3 Hours)

[ Total Marks : 100

- B. : (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 drawn wherever necessary.

- (a) Explain the origin of petroleum on the basis of organic theory. How oil reserves are estimated? Write briefly. 10
- (b) Write short notes on ASTM distillation. 10
- (a) Discuss in brief the process of furfural extraction process for lubricating oil. What are the advantages of using furfural over phenol? 10
- (b) Discuss the methods available for the Gasoline Treatment. Why meticulous balance of TEL is added for the treatment? Explain any one process in detail. 10
- (a) Explain Hydro cracking process in detail. 10
- (b) Why isomerisation is carried out? List various isomerisation processes. Write in detail about aluminum chloride isomerisation process in detail. 10
- (a) Give the composition of Asphalt. What is the action of heat on Asphalt? Explain air blowing of bitumen process with proper flow diagram. 10
- (b) (i) Distinguish between U.O.P. Characterization factor and Correlation index. 10  
 (ii) EFV curve and TBP distillation.
- (a) Write in detail the process of visbreaking giving operation, conditions and neat flow diagram. 10
- (b) Define and discuss, importance of following :- 10  
 (i) Flash point and fire point  
 (ii) Aniline point and API gravity.
- (a) Explain Urea Dew axing process in detail with the diagram. 10
- (b) Blending, is an important operations in refinery, justify the statement. How effective blends can be produced? Explain briefly about Gasoline Blending. 10
- (a) What are the pollution associated with petrochemical plants how it can be prevented? Explain briefly. 10
- (b) Write short notes on Selecto Forming Process. 10