

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)
B.Tech.Sem - VII CHEMICAL : WINTER- 2022
SUBJECT : PETROLEUM REFINERY ENGINEERING

Day : Thursday

Time : 02:30 PM-05:30 PM

Date : 15-12-2022

W-13590-2022

Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.

- Q.1 a) Discuss on "ASTM nomenclature for test methods and their meaning" (05)
b) Give classification of crude oil by considering API gravity. (05)
OR
- Q.1 Elaborate on "Refinery feedstock and refinery products". (10)
- Q.2 Give details of atmospheric distillation with flow diagram. (10)
OR
- Q.2 Give details of vacuum distillation with flow diagram. (10)
- Q.3 Discuss with flow diagram delayed coking. Give its importance. (10)
OR
- Q.3 Illustrate on catalytic cracking related to following points (10)
i. Catalyst used
ii. Cracking reactions
iii. Cracking feedstock
- Q.4 Differentiate between hydrocracking and hydro-treating reactions. (10)
OR
- Q.4 Give details of reactor design for catalytic reforming with respect to (10)
following points
i. Catalyst
ii. Reformer feed
iii. Operating variables
- Q.5 a) Differentiate between isomerization and alkylation. (05)
b) Illustrate effect of process variables on polymerization. (05)
OR
- Q.5 Discuss visbreaking in detail with flow diagram. (10)
- Q.6 Analyze wastewater treatment in petroleum refinery. (10)
OR
- Q.6 What are the new trends in refinery? Give examples. (10)

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