

No Preview
Available

Total No. of Question : [4]

Registration No. :

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Programme Name : Bachelor of Chemical Engineering
Regular B.Tech.Final Year (A.Y.2023-24) ESE Sem. VII Nov.2023
VII SEMESTER (2020 BATCH)
201CHL 404-Petroleum Refinery Engineering

Duration : [02:00 PM - 04:00 PM]

Date : 02 Dec, 2023

Day : Saturday

Marks : 50

Instructions :

1.Read questions carefully.

(Q1) All que are compulsory. [20.0]

CO :- 1, 2, 3

Blooms Taxonomy :- Remember, Understand

(1.1) Explain various oil exploration methods used in refineries. [6.0]

(1.2) What is composition of crude oil? Explain in details. [7.0]

(1.3) Explain the specification of following petroleum fractions in details [7.0]

a) LPG

b) Gasoline

(Q2) All questions are compulsory. [10.0]

CO :- 4

Blooms Taxonomy :- Remember, Understand

(2.1) What is cracking? Explain various methods of cracking and discuss any one in details. [5.0]

(2.2) Along with neat diagram; explain Atmospheric Distillation of crude oil in details. [5.0]

OR [2.2 / 2.3]

(2.3) What is objective of Visbreaking process and What are the various types of Visbreaking? Explain any one in details. [5.0]

(Q3) All questions are compulsory. [10.0]

CO :- 5

Blooms Taxonomy :- Remember, Understand

(3.1) What is catalytic reforming of crude oil? What are various catalysts which are frequently used ? [5.0]

OR [3.1 / 3.2]

(3.2) What are various modes of transportation of crude oil in details. [5.0]

(3.3) Why sulphur is to be removed? What are various methods which are used to separate sulphur derivatives from crude fractions? [5.0]

(Q4) Attempt any two out of three [10.0]

CO :- 6

Blooms Taxonomy :- Remember, Understand

(4.1) Write a short note on Safety and Pollution considerations in petroleum refineries. [5.0]

(4.2) Explain hydrotreating process for smoke point improvement. [5.0]

(4.3) What is the necessity of Bio fuels? Brief advancement in distillation processes in refineries. [5.0]
