

B.Tech. SEM -VII (Chemical 2014 Course (CBCS) : WINTER - 2018
SUBJECT : ELECTIVE – III : PETROLEUM REFINERY ENGINEERING

Day : Friday
Date : 23/11/2018

W-2018-2517

Time : 02.30 PM TO 05.30 PM
Max. Marks : 60

N. B. :

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagram **WHEREVER** necessary.
 - 4) Assume suitable data, if necessary.
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Q. 1 a) Analyze the characteristics of crude oil. **(05)**

b) Discuss the various codes used in petroleum industry. **(05)**

OR

Illustrate classification of crude oil by different ways. **(10)**

Q. 2 Elaborate on: **(10)**

i) Dehydration of crude

ii) Desalting of crude

OR

Draw flow diagram of atmospheric distillation process and explain the same. **(10)**

Q. 3 Analyze delayed coking in detail with flow diagram. **(10)**

OR

Analyze catalytic cracking in detail with flow diagram. **(10)**

Q. 4 Elaborate about catalytic reforming catalyst with respect to following points: **(10)**

i) Operating conditions

ii) Nature of catalyst

iii) Properties of catalyst

OR

Differentiate between hydro treating and hydro cracking reactions. **(10)**

Q. 5 Discuss about polymerization reactions in petroleum industry. **(10)**

OR

Differentiate between Isomerization and alkylation. **(10)**

Q. 6 Analyze environmental issues in petroleum industry. **(10)**

OR

Elaborate on new trends in refinery operations. **(10)**

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