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Roll No

CM-7004(1)-CBGS

B.E. VII Semester

Examination, June 2020

Choice Based Grading System (CBGS)

Petroleum Processing Technology

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. What are the various component of petroleum crude and how they affect the properties of the crude? Explain the properties of the various hydrocarbon series present in crude.
2.
 - a) Discuss the various theories of origin of petroleum.
 - b) Discuss in detail the types of hydrocarbon series, mode of reactions (any two series).
3.
 - a) Define petroleum along with its composition and properties.
 - b) Discuss in detail the status of petroleum refining in India.
4. What is vacuum distillation and why it is used in petroleum refining? Explain the process parameters used in vacuum distillation and mention the products obtained from it with boiling range.
5.
 - a) Define in detail the mechanism of hydro cracking.
 - b) Define and explain the term Isomerization and Polymerization.

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6. a) Describe the process for the manufacture of Air blown Asphalt.
b) Discuss the term 'delayed coking' and sweetening.
7. a) What is hydro cracking? Mention the various reactions occurring during hydro cracking. Explain the process of hydro-cracking with a process flow sheet along with the effect of process variable on product distribution and yield.
b) Explain the alkylation and its objective in reference to the petroleum refining. Explain the mechanism of alkylation and describe any process with process flow sheet and effects of its operating variables on product yield.
8. a) Describe the process for the removal of wax from crude oil.
b) Differentiate between lubricating oils and Grease.

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