

- Q.26 Differentiate between flash point and fire point.
- Q.27 Define dewaxing process and write its need in petroleum industry.
- Q.28 Discuss the reforming and its type in brief.
- Q.29 Discuss about stabilization of crude oil with neat sketch.
- Q.30 Write about cetane number and explain its significance.
- Q.31 Name any five products obtained from fractional distillation of crude oil with their boiling range.
- Q.32 Explain about cloud and pour point.
- Q.33 Explain solvent extraction process and its type in brief.
- Q.34 Write about fractional distillation with neat diagram.
- Q.35 Discuss about propane deasphalting process.

Section-D

Note: Long answer questions. Attempt any two question out of three Questions. (2x10=20)

- Q.36 What is catalytic reforming? Discuss any one catalytic reforming process in detail with neat & clean sketch.
- Q.37 Explain Dubb's thermal cracking process with neat and clean diagram.
- Q.38 Explain desulphurization of petroleum products also explain Doctor's Sweetening process with neat sketch.

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Roll No.

**5 Sem., Branch : Chem.
Subject : Petroleum Refining**

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

- Q.1 Waxes present in petroleum products.
- Are not soluble in them
 - Can be separated out by distillation
 - Crystallize out at low temperature
 - Decrease their viscosity
- Q.2 Which of the following has the highest viscosity of all (at a given temperature)?
- Fuel oil
 - Naphtha
 - Light diesel oil
 - Petrol
- Q.3 Which of the following is used as a solvent in deasphalting of petroleum products.
- Propane
 - Furfural
 - Methyl ethyl ketone
 - Liquid sulphur dioxide
- Q.4 Visebreaking process is used mainly for making:
- High cetane diesel
 - Fuel oil
 - High octane gasoline
 - Smoke free kerosene

- Q.5 The proper arrangement of the petroleum fractions in order of their boiling points is-
- Lubrication oil > diesel > petrol > LPG
 - Petrol > Lubricating oil > Diesel > LPG
 - Lubricating oil > Petrol > diesel > LPG
 - Petrol > diesel > LPG > Lubricating oil
- Q.6 In petroleum refining, the process used for conversion of hydrocarbons to aromatics is -
- Hydrocarbons
 - Alkylating
 - Catalytic reforming
 - Catalytic cracking
- Q.7 Crude petroleum oil is a _____ fuel.
- Primary
 - Fossil
 - Secondary
 - Both A & B
- Q.8 Feed for reforming is generally -
- Reduced crude
 - Vacuum gas oil
 - Atmospheric gas oil
 - Naphtha or straight run gasoline
- Q.9 Octane number of gasoline is a measure of its-
- Ignition delay
 - Resistance to knock
 - Smoke point
 - Ignition temperature
- Q.10 Cracking is a _____ reaction.
- Exothermic
 - Endothermic
 - Photovoltaic
 - Both A & B

Section-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Write the name of any one crude oil pretreatment process.
- Q.12 Write the formula of API gravity.
- Q.13 What is smoke point?
- Q.14 Write two uses of kerosene.
- Q.15 Write formula for aromatic.
- Q.16 What is the boiling temperature of petrol?
- Q.17 Name the process used to separate out different hydrocarbon compounds from petroleum?
- Q.18 Define sweet crude oil.
- Q.19 Name any one polymerization process used in petroleum industry.
- Q.20 Write the name of catalyst used in fluidized catalytic cracking process.

Section-C

Note: Short answer type Question. Attempt any twelve questions out of fifteen Questions. (12x5=60)

- Q.21 Write a short note on transportation of crude oil.
- Q.22 Write the location of any five petroleum refinery in India with their capacity.
- Q.23 Describe the refining of petroleum with a neat diagram.
- Q.24 Define cracking explain types of cracking in brief.
- Q.25 Explain Hot sulphuric acid polymerization process.