Q.27 Define smoke point and state its practical utility.

Q.28 Describe the process of Urea Dewaxing in brief with neat flow sheet.

Q.29 Enlist at least five oil refineries in India with their present capacity.

Q.30 Describe Fluidized bed catayltic process in brief.

Q.31 Define cracking, Differentiate between thermal and catalytic cracking.

Q.32 Draw a neat sketch of vacumm distillation unit

Q.33 Explain Dubb's cracking process with flow seat

Q.34 Describe cold sulphuric acid polymerization process in brief.

Q.35 Explain the phenol extractions process with neat flow sheet.

SECTION-D

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

Q.36 Draw flow sheet and explain MEK dewaxing process in detail, also explain need of dewaxing process in petroleum industry

Q.37 With the flow seat describe the hot and cold sulphuric acid polymerization process in detail.

Q.38 Write a short note on :

a) Composition and classification of crude oil

b) Origin of petroleum

Chemical
Subject:-Petroelum Refining

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Fire point of an oil is determined by the

a) Pensky Martens apparatus

b) Ramsbottom apparatus

c) Saybolt viscometer

d) Conradson apparatus

Q.2 Crude oil is transported from oil field to refineries, mainly by the

a) Road tanker b) Railway tankers

c) Underground pipe d) None of these

Q.3 The main aim of reforming is to produce

a) Gasoline b) Coke

c) Lube oil d) None of these

Q.4 The C.N.G stands for

a) Compressed natural gas

b) Compressed noble gas

c) Cracked natural gas

d) None of these

Q.5 Aniline is the property of

a) Gasoline b) Naphtha

c) L.P.G d) Diesel

Q.6 _____base crude oil is also called asphaltic crude.

a) Paraffinic b) Naphthenic

c) Mixed d) Aromatic

Q.7 Which of following has highest flash point.

a) Kerosene b) Patrol

c) Diesel d) Furnace oil

Q.8 Cetane number of diesel oil is the measure of its

a) Smoke point b) Viscosity

c) Ignition delay d) Oxidation stability

Q.9 C_nH_{2n+2} is the general formula for

a) Olefins b) Napthenes

c) Paraffin's d) All of these

Q.10 Which of the following theories of origin of petroleum does not explain the presence of nitrogen & sulphur compounds in crude oil?

a) Modern b) Carbide

c) Engler's d) All of these

SECTION-B

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

Q.11 Write one drawback of Engler's theory.

Q.12 Write the General formula for cyclic compounds.

Q.13 Write the percentage of carbon in crude oil.

Q.14 Octane number is the property of _____ (Diesel / Petrol)

Q.15 Write full form of ASTM

Q.16 Name any one process used for thermal cracking.

Q.17 Write one example of polymerization.

Q.18 Define specific gravity.

Q.19 Write two uses of coal tar.

Q.20 What is stabilization of crude oil.

SECTION-C

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

Q.21 Explain Fractional distillation of crude oil in brief.

Q.22 Define cetane number and Octane number and write their significance.

Q.23 Differentiate between flash point and fire point.

Q.24 Draw a neat sketch of petroleum refinery.

Q.25 Explain stabilization of crude oil with neat diagram.

Q.26 Explain Electrical desalting of crude oil with a neat diagram.