

- Q.26 Explain the manufacturing of DA with flowsheet.

Q.27 Discuss about dehydration and desulphurization process of petroleum.

Q.28 Describe about uses of Urea with its raw material and chemical reaction.

Q.29 Explain the origin of petroleum with diagram.

Q.30 Discuss about process of ammonium nitrate with its process description.

Q.31 Difference between flash point and fire point?

Q.32 Write about distillation with neat and clean diagram.

Q.33 Difference between evaporation and Drying?

Q.34 Write about viscosity, viscosity index and density.

Q.35 Explain composition of petroleum in detail.

SECTION-D

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

- Q.36 Discuss the manufacturing ammonia with flow sheet in details.

Q.37 What is sugar. Discuss sugar industry with flow sheet, advantages and uses.

Q.38 Write short note on any three:-

 1. Phosphorus fertilizer
 2. Classification of petroleum
 3. Major cement industries in India
 4. Mother liquor

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4th Sem.
Branch : P & P
Subject : Process Industries

Time : 3 Hrs. M.M. : 100

SECTION-A

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

- Q.1 Portland cement is composed of _____ major oxides.

 - a) One
 - b) Two
 - c) Four
 - d) None of above

Q.2 The properties of Petroleum

 - a) Flash point
 - b) Aniline point
 - c) Viscosity
 - d) All of above

Q.3 Chemical composition of Hydrogen in Crude oil

 - a) 83-87%
 - b) 0.05-6%
 - c) 10-15%
 - d) 2-4%

Q.4 What are the micronutrients of fertilizers

 - a) Nitrogen
 - b) Potassium
 - c) Calcium and boron
 - d) All of above

Q.5 The common name of Cao is _____.

 - a) Limestone
 - b) Potassium
 - c) Calcium
 - d) All of above

Q.6 The concentration of sugar cane juice after evaporation process

- a) About 65% solid and 35% liquid
- b) About 35% solid and 75% liquid
- c) About 05% solid and 35% liquid
- d) None of above

Q.7 The API gravity of lighter crude oil?

- a) 10-15
- b) 33-40
- c) 20-22
- d) None of above

Q.8 The process Desulphurization is used to remove _____

- a) Sulphur
- b) Sand
- c) Water
- d) none of above

Q.9 Crystallisation is based on the _____.

- a) Difference in melting point
- b) Difference in boiling point
- c) Difference in pressure
- d) Difference in solubility

Q.10 The Molecular mass of Diammonium Phosphate

- a) 125
- b) 132
- c) 17
- d) 148

SECTION-B

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

- Q.11 What is petroleum.
- Q.12 Draw the diagram of filtration process.
- Q.13 Name any one type of phosphorus fertilizer.
- Q.14 Define crystallization.
- Q.15 Write the formula of specific gravity.
- Q.16 Name any one type of distillation process.
- Q.17 Write one use of cement.
- Q.18 Define desalting.
- Q.19 Name any one type of engg problem associated with ammonia industry.
- Q.20 Define polymerization.

SECTION-C

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

- Q.21 Write about NPK in detail.
- Q.22 What is reforming, explain any one type of reforming process.
- Q.23 What is purification. Explain bleaching process with the use of different bleaching agents.
- Q.24 Discuss the production of cement with flowsheet.
- Q.25 Write about octane number and cetane number with its significance.