

- Q.30 Explain the different methods used for extracting oil from seed in brief.
- Q.31 Draw various symbols used for size reduction equipment.
- Q.32 Write a short on NPK fertilizer.
- Q.33 Explain the manufacturing process of starch from maize.
- Q.34 Write a note on manufacturing of detergent.
- Q.35 Discuss any one of the following.
- Super phosphate
 - Granulation of fertilizer

SECTION-D

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

- Q.36 Describe the manufacturing of sugar from sugarcane with the help of flow sheet.
- Q.37 With the help of flow sheet describe the continuous process for manufacturing of fatty acids. Soap and glycerin.
- Q.38 Describe the manufacturing process of Portland cement and also explain the major engineering problems associated with this process.

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4th Sem / Branch : Chemical Engineering Sub.: Chemical Technology

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 Sulphuric acid produced by contact process is
- Cheaper
 - Pure & concentrated
 - Of poor quality
 - Very dilute
- Q.2 High purity oxygen is used for
- Welding
 - Cutting of metals
 - Medical purpose
 - All of the above
- Q.3 Oil and fats merely differs in
- Composition
 - Density
 - Physical state
 - Chemical Properties
- Q.4 Raw juice extracted from sugarcane contains
- 75 to 80% sucrose
 - 7.5 to 8.0% sucrose
 - 15 to 20% sucrose
 - 50 to 60% sucrose
- Q.5 The state which has the largest sugar mills in India is
- Bihar
 - Uttar Pradesh
 - Tamil Nadu
 - None of these
- Q.6 The percentage of Nitrogen in atmosphere is about
- 78
 - 21
 - Less than 1
 - 100

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- Q.7 NPK stands for
- Normal Phosphorous Potassium
 - Nitrogen Phosphorous Potassium
 - Normal Physical Potassium
 - Nitrogen Phosphorous calcium
- Q.8 The detergent is
- A soap
 - Used as a catalyst
 - Used as water softeners
 - A cleansing agent
- Q.9 Formation of soap involves
- Hydrolysis
 - Esterification
 - Hydrogenation
 - None of the above
- Q.10 High alumina cement is manufactured by fusing
- Limestone and slaked lime
 - Limestone and quick lime
 - Limestone and bauxite
 - Limestone and sand

SECTION-B

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

- Q.11 Write the chemical formula for sucrose.
- Q.12 Name any two types of flow sheets.
- Q.13 Draw the symbol for filter press.

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- Q.14 Give the name of solvent used for vegetable oil extraction method.
- Q.15 Write any two uses of bagasse.
- Q.16 Define soap.
- Q.17 Name the raw materials used production of ammonia.
- Q.18 Urea is a _____ fertilizer.
- Q.19 Define pulp.
- Q.20 Write four uses of paper.

SECTION-C

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

- Q.21 Write about different types of additives and their role in soap and detergent.
- Q.22 Explain the major engineering problems associated with the manufacturing of urea.
- Q.23 Compare the sulfate and sulfite pulping process.
- Q.24 Explain the manufacturing process of beer.
- Q.25 Discuss the classification of cement.
- Q.26 Explain the manufacturing process of ammonium nitrate.
- Q.27 Write major engineering problems while sulfuric acid manufacturing.
- Q.28 Draw the flow sheet of paper making process.
- Q.29 Write the properties and uses of sulfuric acid.

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