

- Q.5 Glass is
- a crystalline solid
 - a super cooled liquid
 - a solid having a definite melting point
 - a compound of Ca Na Si and O
- Q.6 Acid pH range
- 0-7
 - 7-14
 - 0-14
 - None of these
- Q.7 Wine is obtained after alcoholic fermentation of
- rice
 - wheat
 - grapes
 - barley
- Q.8 The saponification of a fat or oil is done using _____ solution for cold process.
- KOH
 - NaOH
 - HCl
 - NaCl
- Q.9 Nitrogen content of a nitrogenous fertilizer is 35%. It could be
- Urea
 - Ammonium nitrate
 - Calcium ammonium nitrate
 - Ammonium sulphate
- Q.10 _____ is the waste liquor from the kraft pulping process after pulping is completed.
- Black liquor
 - White liquor
 - Red liquor
 - Green liquor

SECTION-B

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

- Q.11 Chemical formula of urea is _____
- Q.12 What is range of alkali?
- Q.13 Hydrogenation is the conversion of unsaturated acid groups into the saturated one by a catalyst _____.
- Q.14 In the manufacture of urea, the intermediate chemical formed is _____.
- Q.15 Sucrose content in canesugar may be around _____.
- Q.16 Vegetable ghee is manufactured by _____
- Q.17 Fourdrinier machine is used in the manufacture of _____ (sugar / paper)
- Q.18 Washing soda is chemically represent _____.
- Q.19 What is catalyst used in manufacture of sulphuric acid by contact process?
- Q.20 The crushed grapes are known as _____.

SECTION-C

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

- Q.21 Draw the equipments layout for reactors.
- Q.22 Draw the block diagram of a petroleum refinery.
- Q.23 What is difference between mechanical and solvent extraction of oil.
- Q.24 Discuss about different types of additives and their role in soap and detergents.
- Q.25 Discuss the comparison between sulfate and sulfite pulping process.