

- Q.25 Write any four Application of Le-chateleir Principle.
- Q.26 Discuss theory of catalyst?
- Q.27 Define Gels and write types of gels.
- Q.28 What is Brownian Movement in colloidal system?
- Q.29 Explain Optical properties of sol?
- Q.30 What is composition of soap and give reaction of manufacturing of soap.
- Q.31 What is Hardy - Schulz Law in coagulation of colloid?
- Q.32 What is Saponification reaction?
- Q.33 List types of detergents.
- Q.34 What are Limitation of Soaps?
- Q.35 What is Lewis Concept of acid & bases with examples.

#### **SECTION-D**

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

- Q.36 Explain Cleansing action of Soaps and its chemical composition.
- Q.37 Explain
- Tyndall Effect
  - Electrical property of sol.
- Q.38 Define soap. Write chemical composition of soap. Discuss the cleansing action of soap.

(40)

(4) 182631/122631/032631

No. of Printed Pages : 4 182631/122631/032631  
Roll No. ....

**3rd Sem / Text. proc., Text Chem  
Subject:- Physical and Organic Chemistry /  
Basic Chemistry**

Time : 3Hrs. M.M. : 100

#### **SECTION-A**

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

- Q.1 Which one of them is natural dye
- reactive
  - vat
  - direct
  - indigo
- Q.2 Soap in water is \_\_\_\_\_ solution.
- basic
  - acidic
  - colloidal
  - none of them
- Q.3 Process of addition of halogens in unsaturated compound is called
- Halogenation
  - rinsing
  - hydrogenation
  - printing
- Q.4 Process of addition of hydrogen in unsaturated compound is called
- Washing
  - rinsing
  - hydrogenation
  - printing

(1) 182631/122631/032631

Q.5 General formula of Alkene is

- a)  $H_{2n+2}$
- b)  $C_nH_{2n}$
- c)  $C_nH+2$
- d)  $C_n$

Q6 The process of scattering of light by the sol particles is called \_\_\_\_\_

- a) Light effect
- b) Tyndall effect
- c) sound effect
- d) none of them

Q.7 The pH of a solution can be measured with the help of an apparatus called \_\_\_\_\_

- a) Washing
- b) rinsing
- c) pH meter
- d) printing

Q8 Property of organic compounds having same chemical formula but different properties

- a) Chlorination
- b) Isomerism
- c) Sulphonation
- d) hydrogenation

Q.9 Dye manufactured in industry is called \_\_\_\_\_ dyes

- a) synthetic
- b) natural
- c) market
- d) all of them

Q.10 Natural sources of fats and oil comes from a variety of

- a) Animal
- b) vegetable
- c) mineral
- d) all of them

## SECTION-B

**Note:** Objective type questions. All questions are compulsory.  $(10 \times 1 = 10)$

Q.11 Chemical Formula for Acetic Acid is \_\_\_\_\_.  
( $H_2SO_4/CH_3COOH$ )

Q.12  $pH = -\log [H^+]$  10 is formula of? (Dye/pH)

Q.13 Dye obtained from nature is called \_\_\_\_\_ dyes  
(synthetic/natural)

Q.14 What does -CHO functional group is called?  
(Ketone/Aldehyde)

Q.15 Name the scale on which pH values are computed?

Q.16 Name any two hydrocarbons.

Q.17 Name any two water soluble dyes.

Q.18 What is general formula of Alkyne?

Q.19 Lyophobic sols are also called Solvent \_\_\_\_\_  
(loving/hating)

Q.20 Acids release \_\_\_\_\_ ion in water. ( $H^+OH^-$ )

## SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions.  $(12 \times 5 = 60)$

Q.21 Differentiate Soaps from detergents?

Q.22 Write any five properties of Enzyme Catalyst.

Q.23 Classify cyclic Compounds.

Q.24 What is protective colloid.