

Q.22 Name the functional group present in the following compounds :-

- a)  $CH_3COCH_3$
- b)  $CH_3COOH$
- c)  $C_2H_5OH$
- d)  $CH_3CH_2CHO$

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Explain addition reaction and rearrangement reactions in detail with examples.
- Q.24 Explain the flow sheet and process description of paint manufacturing in detail.
- Q.25 Write the IUPAC name of the following
- a)  $CH_3-NO_2$
  - b)  $CH_3-C\equiv CH$
  - c)  $CH_3-CH_2-CH_2-Cl$
  - d)  $CH_3-CH_2-CHO$

No. of Printed Pages : 4

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220523

**2nd Sem. / Branch: Chemical , Chem P&P**

**Subject : Organic Chemistry**

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 Which of the following hydrocarbon is unsaturated?
- a)  $C_2H_6$
  - b)  $C_3H_6$
  - c)  $C_4H_{10}$
  - d)  $CH_4$
- Q.2 Which of the following compounds contain alcohol group?
- a)  $CH_3-Cl$
  - b)  $CH_3-COOH$
  - c)  $CH_3-CH_2-OH$
  - d)  $CH_3-CHO$
- Q.3 General formula for alkane is \_\_\_\_\_
- a)  $C_nH_{2n}$
  - b)  $C_nH_{2n-2}$
  - c)  $C_nH_{2n+2}$
  - d)  $C_3H_{3n}$

Q.4 In the following reactions, which one is the example of substitution reaction?

- a)  $CH_2=CH_2 + H_2 \xrightarrow{Ni} CH_3-CH_3$
- b)  $CH_3CH_2Br + OH^- \longrightarrow CH_2=CH_2 + H_2O + Br^-$
- c)  $CH_4 + Cl_2 \xrightarrow{Sunlight} CH_3-Cl + HCl$
- d) None of these

Q.5 Which one of the following compound can have a triple bond?

- a)  $C_2H_4$
- b)  $CH_4$
- c)  $C_3H_4$
- d)  $C_3H_8$

Q.6 In paints, the pigment is responsible for \_\_\_\_\_

- a) Durability
- b) Colour
- c) Smoothness
- d) Glassy face

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Define organic chemistry.

Q.8 Give one example of alkene.

Q.9 Write one example of carboxylic acid.

Q.10 Write the molecular formula of phenol.

Q.11 Give an example of substitution reaction.

Q.12 Write the name of ingredient of paint which gives it, the binding property and form opaque coating.

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Write four importance of organic compounds.

Q.14 Define saturated and unsaturated compounds.

Q.15 Write four physical properties of alkene.

Q.16 Write the two uses of each alkane and alkyne.

Q.17 How can alkane be prepared from hydrogenation of alkenes?

Q.18 Define distillation and chromatography.

Q.19 Write four characteristics of good paint.

Q.20 Write the chemical properties of alkyne for addition of hydrogen.

Q.21 Define aliphatic and alicyclic compounds.