

# **BOARD QUESTION PAPER**

**Subject: Chemistry** 

Topic: 12. Aldehydes, Ketones and

Class : XII

Carboxylic acids

### Section (A)

- Q. 1.: Select and write the most appropriate answer from given alternatives in each sub-question.
  - i) What is the bond angle of carbonyl compound of  $(\Sigma=0)$ ?
    - a)  $120^{\circ}$

b)  $130^{\circ}$ 

c)  $140^{\circ}$ 

- d)  $110^{0}$
- ii) The structure of Acryladehyde is
  - a) CHO

b) CHO

**Total Marks: 20** 

Time: 1 Hr.

- с) СНО
- d) CHO
- iii) The IUPAC name of
  - a) 3 methylpent 2, 4 dione
- b) 3 methyl pentanone

c) pentandione

- d) methyl pent 2, 4 dione
- iv) Formation of benzaldehyde from benzoyl chloride by using  $H_2$ -Pd/BaSO<sub>4</sub> is
  - a) Wurtz fittig reaction
- b) Rosenmund reduction
- c) Kolbe's Schimdth Reaction
- d) Etards Reaction

- v) Formalin contains
  - a) Formaldehyde
- b) Acetaldehyde
- c) Acetone
- d) Benzaldehyde

#### Q.2: Very short answer type Question.

- i) What are ketones?
- ii) Write the defination and general formula of aliphatic aldehyde.

### Section (B)

: Answer the following questions. (Any Three)

6

2

- **Q.3:** How will you obtained benzaldehyde from benzene?
- **Q.4:** Give the preparation method of benzaldehyde from benzoyl chloride.
- Q.5: Give the methods for preparation of adipic acid from cyclohexene.
- **Q.6:** Explain Etard reaction with its example.

#### Section (C)

: Answer the following question. (Any One)

3

- Q.7: What are Cross-Aldol Condensation reaction? Give the mechanistic path.
- **Q.8:** Complete the given reaction.

i) 
$$OH \longrightarrow A$$

$$A \xrightarrow{H_2} B$$

ii) 
$$C=0$$
  $\xrightarrow{i) H_2N-NH_2, H_2O}$   $\overrightarrow{ii) kOH, ethandiol}$ 

## Section (D)

: Answer the following question. (Any One)

4

- **Q.9:** Write a short note on cannizzaro reaction and cross cannizzaro reaction.
- **Q.10:** Give the preparation method of m-nitro acetophenone from Benzene molecule.

\* \* \*

