

Name: _____						
Subject: Chemistry		Class: 12 th		Time: 60 minutes		
Chapter No.13		MJDexpert.com			Total Marks:	30
					Obtained marks	

Note: Please attempt any 7 short questions from Question 2. Also, attempt both parts (a and b) of Question 3. Cutting and removal of any content is strictly prohibited.

Objective-Section

Q. 1 Encircle the correct answer. (8x1=8)

1. The reagent used to reduce a carboxylic group and alcohol is

- (A) H_2/Ni (B) H_2/Pt (C) $NaBH_4$ (D) $LiAlH_4$

2. Which of the following is not directly prepared from CH_3COOH ?

- (A) Acetyl Chloride (B) Ethyl acetate (Ester)
(C) Acetic anhydride (D) Acetamide

3. Which one is used in the manufacturing synthetic fiber?

- (A) Formic acid (B) Oxalic acid (C) Carbonic acid (D) Acetic acid

4. One of the following organic compounds reacts with Sodium Bicarbonate to produce CO_2 gas:

- (A) CH_3COOH (B) CH_3-O-CH_3 (C) CH_3-CH_2-OH (D) CH_3COOCH_3

5. Which of the following is the weakest acid?

- (A) Phenol (B) Benzoic acid (C) Ethyl alcohol (D) Water

6. Which test is applied to detect amino-acid?

- (a) Fehling's test (b) Ninhydrin test (c) iodoform test (d) 10% NaOH solution test

7. Carboxylic acid exists as a cyclic dimer in solution with:

- (a) Water (b) Alcohol (c) Benzene (d) All

8. Which of the following compound will have the highest boiling point?

- (A) Methanal (B) Ethanal (C) Propanal (D) 2-Hexanone

Subjective-Section

Q.2 Write short answers of any SEVEN (7) of the following questions: (7x2=14)

- Write structural formulas of: (i) Phthalic acid (ii) Malonic acid
- Why lower carboxylic acids are very soluble in water?
- Write manufacture of **acetic acid** from acetylene.
- Write four uses of acetic acid?
- Define amino acid, Explain **Zwitter ion**.
- What is meant by essential and non-essential amino acids?
- What is Stecker Synthesis? Give one example.
- What is Ninhydrin test?

Q.No.3 Long Question:

(4+4=8)

- Write the mechanism reaction of acetic acid with $SOCl_2$.
- Give equations to show the reactions of acetic acid with
(i) Na_2CO_3 (ii) $NaHCO_3$ (ii) PCl_5