

(i) Printed Pages : 4

Roll No.

(ii) Questions : 9

Sub. Code :

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Exam. Code :

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B.A./B.Sc. (General) 4th Semester

1046

CHEMISTRY (Same for B.Sc. Microbial and Food Technology)

Paper : XIV Organic Chemistry-B

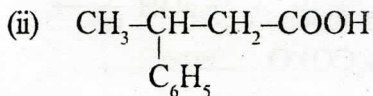
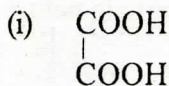
Time Allowed : Three Hours]

[Maximum Marks : 22

Note :- Attempt **five** questions in all, selecting **one** question from each Unit. Unit-V is compulsory.

UNIT—I

1. (a) Write IUPAC names of the following :



2

(b) Why carboxylate ion is more stable than carboxylic acid ?

Discuss.

2

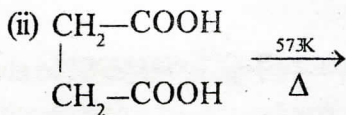
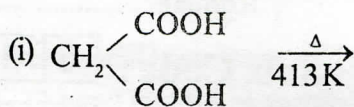
2. (a) Convert :

(i) Acrolein into Acrylic acid

(ii) Acrylic acid into 2,3-dibromoprepanoic acid.

2

(b) Action of heat on :

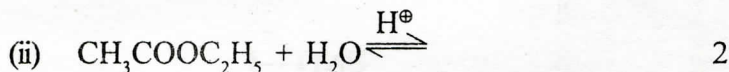
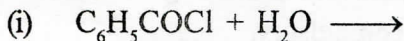


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UNIT—II

3. (a) Give the order of reactivity of acid derivatives toward nucleophilic acyl substitution. 2

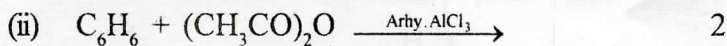
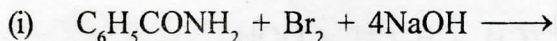
(b) Complete :



2

4. (a) Account that acetamide is amphoteric in nature . 2

(b) Complete the following :



2

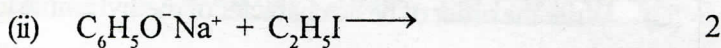
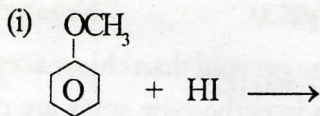
UNIT—III

5. (a) What happens when :

(i) Diethyl ether reacts with chlorine in the presence of light.

(ii) $(\text{CH}_3)_3\text{COCH}_3$ react with conc. HI at 373 K. 2

(b) Complete it :



6. (a) What are detergents, how they differ from soap ? 2

(b) Discuss :

(i) Anionic detergents

(ii) Non-ionic detergents. 2

UNIT—IV

7. (a) Account for the following :

(i) Aniline does not undergo Friedel Craft reactions.

(ii) Gabriel phthalimide synthesis is preferred for synthesis of primary aliphatic amines not aromatic primary amines. 2

(b) Convert :

(i) Aniline into sulphanilic acid

(ii) Do Bromination of Aniline. 2

8. (a) Distinguish between :

(i) $\text{C}_6\text{H}_5\text{NH}_2$ and $\text{C}_6\text{H}_5\text{NHCH}_3$

(ii) $\text{C}_2\text{H}_5\text{NH}_2$ and $(\text{C}_2\text{H}_5)_2\text{NH}$ 2

(b) Give the mechanism of nucleophilic substitution in nitroarenes. 2

UNIT—V

9. (i) Flouroacetic acid is stronger acid than chloroacetic acid.
(ii) Why C-O bond lengths in carboxylic acids are equal ?
(iii) Write the order of basic character of methyl amine in aqueous phase.
(iv) Formula of Hinsberg reagent.
(v) Write the equation to show that Cu^{+2} give blue colour with ethyl amine.
(vi) During nitration of arenes, what is electrophile in nitrating mixture ($\text{Conc. HNO}_3 + \text{H}_2\text{SO}_4$) ?

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