

(i) Printed Pages :4]

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(ii) Questions :9]

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B.A./B.Sc.(General) 4th Semester 1046

CHEMISTRY

(Same for B.Sc. Microbiol & Food tech.)

Paper - XIV : Organic Chemistry-B

Time : 3 Hours]

[Max. Marks : 80

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

(i) COOH

|

COOH

(ii) $\text{CH}_3\text{—CH—CH}_2\text{—COOH}$

|

C_6H_5

2

(b) Why Carboxylate ion is more Stable than carboxylic acid?
Discuss.

2

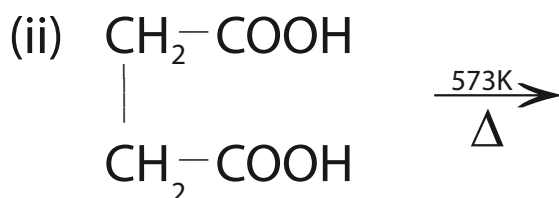
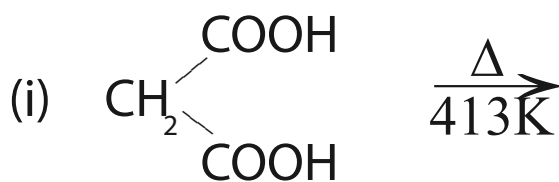
2. (a) Convert:

(i) Acrolein into Acrylic acid

(ii) Acrylic acid into 2,3-dibromopropanoic acid

2

(b) Action of heat on :



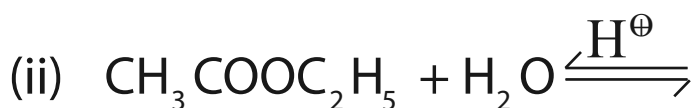
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UNIT-II

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

2

(b) Complete:

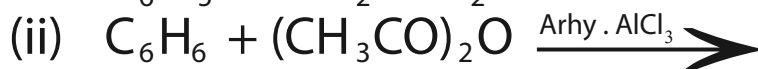
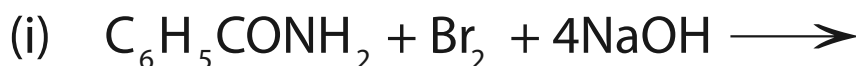


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4. (a) Account that acetamide is amphoteric in nature.

2

(b) Complete



2

UNIT-III

5. (a) What happens When :

(i) Dilethylether reacts With Chlorine in the presence of light

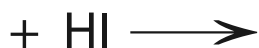
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(ii) $(\text{CH}_3)_3\text{COCH}_3$ reacts with conc. HI at 373 K.

2

(b) Complete it:

(i) OCH_3



2

(ii) $\text{C}_6\text{H}_5\text{O}^-\text{Na}^+ + \text{C}_2\text{H}_5\text{I} \longrightarrow$

2

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

(b) Discuss:

2

(i) Anionic detergents

(ii) Non-ionic detergents

UNIT-IV

7. (a) Account for the following :

(i) Aniline does not undergo Friedel craft reactions.

2

(ii) Gabriel phthalamide 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

8. (a) Distinguish between:

2

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

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

2

UNIT-V

9. (i) Why fluoroacetic acid is stronger acid than chloroacetic acid
(ii) Why C- O bond lengths in carboxylic acid 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($\text{Conc. HNO}_3 + \text{H}_2\text{SO}_4$)?

6