

OR

Write a note on acid and base catalysed ring opening of epoxides.

Zalāa-2. Write a note on oxidation reactions of carbonyl compounds.

OR

Write the reaction mechanism of the following :

- i) Mannich reaction ii) Aldol condensation

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Zalāa-3. Discuss the base and acid catalysed hydrolysis of esters.

OR

Explain the various chemical reactions of monocarboxylic Acids.

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Zalāa-4. Describe the synthetic Transformation of Aryl Diazonium Salts.

OR

Describe the various methods for the separation of Amines.

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Zalāa-5. Explain the electrophilic substitution reaction of Furan, Pyridine and Quinoline.

OR

Describe Merrifield synthesis of polypeptides.

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Code No. : B-238(A)

Annual Examination - 2017

B.Sc.-II

CHEMISTRY

Paper - II

ORGANIC CHEMISTRY

Max.Marks : 33

Min Marks : 11

Time : 3 Hrs.

Note : Section 'A' is objective type, containing 08 questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

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(Section-'A')

(Answer the following very short-answer-type questions in one or two lines.) (1x8=8)

Zalāa- 1. What is rectified spirit?

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Zalāa- 2. Write one use of ethylene glycol?

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Zalāa- 3. What is the nature of Carbonyl group?

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Zalāa- 4. Write the name of the reagent which reacts with acetamide to give methylamine.

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ZālĀ-5. CēĒ šy yllvōĀ šy āvavūĒyĀ āvāo āvāhŷ ñ

Write Williamson's synthesis for preparation of ether.

ZālĀ-6. »ĥŷkĀĥĥkĀĀ yĉ; āq ``uā ytl mĉĒē?

What is diazotization reaction?

ZālĀ-7. CĀ»ĥĀĀĀ ĀsĀšjūā āvāhŷ ñ

Write Indophenin reaction.

ZālĀ-8. yt-āvsw āĀĀyĉ; āq ``uā ytl mĉĒē?

What do you understand by the isoelectric point of amino acids?

hĀĥ-'r' (Section-'B')

āĀĀĀšyġ vi ā ĒĒĒĒ ZālĀĥ šy ĒĒĒ 150-200 ĀĀĀ-yāĀ tĥ Āĥ ñ
(Answer the following short-answer type questions with word limit 150-200) **(2x5=10)**

ZālĀ-1. āvāšyāw šy āĀĀvāšyĒĀ ĀsĀšjūā šyĉytl āĤ ñ

Explain dehydration reactions of glycols.

OR

ĀyĀĀw tĥĤĀĥĒšy j šy šy šyĒĀ tāĀ Ēāyāūāšy; āsĀšjūā; āšyā wĀĀ šyĀĤ ñ

Explain the chemical reactions of phenol due to aromatic ring.

ZālĀ-2. šyāĀĀv uāšyĥtĥyĀĥ šyāyĀĀšy ytl šy Ēquāšy šy rĀĉĥĀvāhŷ ñ

Write the use of acetals as protecting group of carbonyl compounds.

OR

``vĥĒyĀ Āq uĀ ĀsĀšjūā šy rĀĉĥĀvāhŷ ñ

Explain the reaction mechanism of Clemmenson's reduction reaction.

ZālĀ-3. Āv yĉd - ĥĥšy; Ēv šyāĀĀšyĒĀ šy āvāo āvāhŷ ñ

How will you prepare Tartaric acid from Argol.

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OR

šyāĀ yāvšy; Ēv šyāĀyĉ uāytl mĉĒē? ŷyāšyĀy»ĥŷyĀĥv ``vāĉĀ»ĥ ŷyāĥĀĀ»ĥŷwĥŷyāšy ŷĀĀĀĀ»ĥĥšyĉZāĥ šyĒĀĥ

What are acid derivatives? Starting from acetic acid, outline the preparation of acetyl chloride, acetamide and acetic anhydride.

ZālĀ-4. āĀĀvāhŷ ĀsĀšjūā šyĉytl āĤ ñ

i) šyāĀv ŷtĀĀ ĀsĀšjūā

ii) NāyĤĀ rĀĉĀĀ»ĥ ĀsĀšjūā

Explain the following reactions :

i) Carbylamine reaction

ii) Hoffmann - bromamide reaction

OR

ŷĥšyĀ ĀĀĥĥĥ; āĀĀĥĥĥšyā šy; āq uĀ yĉZāĥ āvāšyā qĀĀĀšyā wĀĀ šyĀĤ ñ

What are the products formed on reduction of Alkyl nitrite and Nitroalkane.

ZālĀ-5. Āšyāĉ šy āvāo yĉšyĀĀvā šyā yllvōĀ šyĉšyā kāmā Ēē?

How is Quinoline obtained by Skraup's synthesis?

OR

ŷwĥ ŷĥĀĥ; ĒvāĥĒ yĤĀ šy Zāšāw šyā wĀĀ šyĀĤ ñ

Explain the effect of heat on and -amino acids.

hĀĥ-'y' (Section-'C')

āĀĀĀšyġ Āāi ē ĒĒĒĒ ZālĀĥ šy ĒĒĒ 300-350 ĀĀĀ-yāĀ tĥ Āĥ ñ
(Answer the following long-answer type questions with word limit 300-350) **(5x5=25)**

ZālĀ-1. āvyĒāw šy; āyāšyĒĀ qĒ āĥĥĥā āvāhŷ ñ

Write a note on oxidation of glycerol.