



Dnyansagar Coaching Classes, A'nagar

Ist Preliminary

Std. - XII

Sub- Chemistry-II

Time - 2 hrs

Max Marks - 40

(Organic & Inorganic chemistry)

- Note :-**
- All questions are compulsory
 - Give balanced equation & Draw neat and labelled diagram whenever necessary.

Q.1. Select and write the most appropriate answer from given alternatives in each sub question. (08)

- The separation of lanthanides in ion exchange method is based on:
 - basicity of the hydroxides
 - size of the ions
 - the solubility of their nitrates.
 - oxidation state of the ion.
- Phosgene is:
 - PH₃
 - POCl₃
 - CS₂
 - COCl₂
- Phenol can be distinguished from alcohols with:
 - Schiff's base
 - Tollen's reagent
 - FeCl₃
 - Lime water.
- Ketones are formed by the oxidation of:
 - aldehydes
 - primary alcohols
 - secondary alcohols
 - tertiary alcohols.
- Hydrolysis of esters in alkaline medium is known as:
 - Saponification
 - Hydration
 - Esterification
 - Alkalisiation.
- Primary amine reacts with an aldehyde to give:
 - amide
 - imine
 - nitrite
 - nitro compound.
- The protein present in hairs is:
 - albumins
 - insulin
 - keratin
 - haemoglobin.
- The medicines given to patients who are violent and mentally agitated are called:
 - Antibiotics
 - Sedatives
 - Analgesics
 - Antipyretics

Q 2. A Attempt any ONE (02)

- How is glucose prepared from sucrose.
- Give the preparation of Dacron.

B Attempt any ONE (02)

- How many optical isomers possible for 2-chlorobutane ? write enantiomers of D-chloro butane.
- What are the fatty acids ? How will you obtain ethanoic acid from ethanol.

C) Answer the following. (02)

- Write the structures of following.
 - 2-ethoxy propane
 - ethyl ethanoate.

D) Give reasons.(any one) (02)

a) Alcoholic HCl is used in the preparation of glucose from sucrose.

b) 1% ethanol is added in chloroform bottles.

Q.3 A) Attempt any ONE of the following. (03)

i) How will you prepare ethyl methyl ether from -

a) Diazomethane b) ethylchloride. c) Give uses of ether

ii) How will you convert -

a) chloral in to chloroform.

b) chloroform in to carbylamine.

c) Salicylic acid to aspirin.

Q. 3B] Answer any ONE (03)

i) Define monohydric alcohols ? Give their classification.

ii) How will you obtain acetaldehyde & acetone from Grignard reagent.

C] Answer the following. (02)

i) Write any two use of nylon-6 & any two physical properties of amines.

Q.4. A] Answer the following . (04)

i) Explain the Mechanism of the alkaline hydrolysis of a primary alkyl halide with E.P.D.

B) Answer any one: (04)

i) Identify A, B, C & D in the following reaction & rewrite the equations.

a) Methane $\xrightarrow{\text{Chlorination}}$ A

b) A $\xrightarrow{\text{alkaline hydrolysis}}$ B

c) C $\xrightarrow{\text{SOCl}_2}$ C

d) D $\xrightarrow{\text{KCN}}$ D

ii) a) What is action of Acetylchloride on ethyl amine & diethyl amine.

b) What is the action of fehling solution on acetaldehyde & acetone.

Q. 5 A] Answer any ONE (04)

i) What is action phenyl hydrazine on acetaldehyde & acetone.

ii) What is action of following on ethyl alcohol ---

a) PCl_5 b) conc. H_2SO_4 c) Na d) $\text{K}_2\text{Cr}_2\text{O}_7$

B] Answer any TWO (04)

i) State & explain saytzeff rule.

ii) Explain the order of Basicity of amines.

iii) How will you prepare acetic acid from.

a) acetonitrile b) solid CO_2 .
