Roll Number	PR XII (01) 16	Superintendent
In Figures: _____	CHEMISTRY (New)	Signature / Stamp:
In Words: _____	Inter Part-II	_____
_____	(Fresh/Reappear)	
	Flc. No. _____ (For Board's Office use only)	

CHEMISTRY (New)
Inter Part-II
(Fresh/Reappear)

Flc. No. _____ (For Board's Office use only)

Time Allowed: 3 Hours **Marks:** 65

Note: There are THREE sections in this paper i.e. Section A, B and C.
Attempt Section-A on the same paper and return it to the Superintendent within the given time.
No marks will be awarded for **Cutting, Erasing or Overwriting. Marks of Identification** will lead to UFM case, **Mobile Phone** etc are not allowed in the examination hall.

Time Allowed: 20 minutes **Marks: 18**

Section – A

Q-I **Write the correct option i.e. A, B, C or D in the empty box provided opposite to each part.**

i.	Which of the given metal sulphate is not soluble in water?	A.	$BaSO_4$	B.	Na_2SO_4	C.	$ZnSO_4$	D.	None of these	A
ii.	Which one of the given is not an alkali metal?	A.	Ra	B.	Rb	C.	Cs	D.	Fr	A
iii.	Transition elements usually exhibit .....valancies.	A.	Normal	B.	Variable	C.	Permanent	D.	Unchangeable	B
iv.	All the substances are organic except.....	A.	Acetic Acid	B.	Methane	C.	Urea	D.	Graphite	D
v.	The reactant which will react fast in SN – 2 reaction is	A.	CH_3F	B.	CH_3Cl	C.	CH_3Br	D.	None of these	C
vi.	$R-CH_2-X$ is an example of .....halide.	A.	Isopropyl	B.	Secondary alkyl	C.	Primary alkyl	D.	Both B and C	C
vii.	Clemmenson reduction of aldehydes yields.....	A.	Alkanes	B.	Alkenes	C.	Alcohols	D.	Ethers	A
viii.	The reaction between carboxylic acid and alcohol is called.....	A.	Esterification	B.	Carboxylation	C.	Alcoholation	D.	Hydrolysis	A
ix.	Protein present in hemoglobin has the structure known as ..... structure.	A.	Primary	B.	Secondary	C.	Tertiary	D.	Quaternary	D
x.	Mauve is an example of .....dye.	A.	Direct	B.	Azo	C.	Acidic	D.	Basic	D
xi.	The marsh gas mainly consists of	A.	SO_2	B.	H_2S	C.	CH_4	D.	C_2H_4	C
xii.	The reaction used to locate the position of double bond in alkene is.....	A.	Electrolysis	B.	Ozonolysis	C.	Polymerization	D.	Combustion	B
xiii.	Grignard reagents react with carbon dioxide (CO_2) to produce.....	A.	Ketone	B.	Alcohol	C.	Aldehyde	D.	Carboxylic acid	D
xiv.	Which one of the given is a non sugar?	A.	Monosaccharides	B.	Oligosaccharides	C.	Polysaccharides	D.	Disaccharides	C
xv.	Oxidation of primary alcohol in the presence of $K_2Cr_2O_7$ produces	A.	Carboxylic acid	B.	Ketones	C.	Alkyl halides	D.	Alkynes	A
xvi.	An example of condensation polymer is.....	A.	PVC	B.	Polyethene	C.	Nylon	D.	Both A and B	C
xvii.	Photochemical smog is primarily caused by.....	A.	CO_2	B.	CO	C.	NO_2	D.	O_3	C
xviii.	The best source of iron is.....	A.	Potato	B.	Tomato	C.	Milk	D.	Organ meat	D

PR XII (01) 16
CHEMISTRY (New)
Inter Part-II
(Fresh/Reappear)

Note: **Time allowed for Section – B and Section – C is 2 Hours and 40 minutes.**

Section – B

Marks: 40

Q-II Answer any TEN parts. Each part carries FOUR marks.

1. Explain the trends is thermal stability of Nitrates of group II – A Elements.
2. Describe the catalytic properties of Transition Elements.
3. Why carboxylic acids are stronger acids than Phenol?
4. Write note on Williamson's Ether Synthesis.
5. Differentiate between Addition and Condensation Polymers.
6. Write note on inert pair effect and the formation of covalent bond
7. Differentiate between Partial and total Synthesis.
8. Write note on Green Chemistry.
9. Explain Wolf – Kishner reduction.
10. What is optical activity? Give examples.
11. Briefly describe the roel of Inhibitors of energy catalyzed reactions.
12. Briefly describe the relative stability of alkenes?
13. What is Lucas Test?

Section – C

Marks: 27

Note : Attempt any THREE questions. All questions carry equal marks.

Q-III (a) Discuss the chemical reactions of I – A elements with water, oxygen and halogens.

(b) Write the chemical reactions of alkyne with the following.

(i) HBr (ii) Ozone (iii) H_2O/H^+ (iv) H_2

Q-IV (a) Give IUPAC names to the following.

(i) $[CO(NH_3)_3(NO_2)_2]$ (ii) $Na_2[Fe(NO)(CN)_5]$

(iii) $CH_3 - C \equiv CH$ (iv) $CH_3 - \overset{\overset{O}{\|}}{C} - CH_3$

(b) Define elimination reactions. Also explain their types with examples.

Q-V (a) Write the chemical reactions of Grignard's reagents with the following.

(i) Aldehyde (ii) Acetone (iii) Ester (iv) Nitrite (v) CH_3COCl

(b) Explain Ortho/Para orientation in benzene.

Q-VI (a) What is enzyme? Discuss the role of enzymes as bio catalyst?

(b) Briefly explain Global warming and its adverse effects.