Answer Sheet No. CHEMISTRY AJK-12-19 Roll No.

PART – II 019/1 (OBJECTIVE PART)

(INTERMEDIATE) (⚙)

Sign. Dy. Supdnt. Fictitious Roll No. (For Office Use) Sign. Candidate

CHEMISTRY

(PART –II) 019/1 (INTERMEDIATE) (⚙) Marks : 17

(OBJECTIVE PART) Time : 20 Minutes

Note:- Write your Roll No. in space provided. Over writing, cutting, using of lead pencil will result in loss of marks. All questions are to be attempted.

1- Each question has four possible answers, Tick (√) the correct answer. (17)

1	Mark the correct statement;							
	A	All lanthanides are present in the same group	B	All halogens are present in the same period	C	All the alkali metals are present in same group	D	All the nobel gases are present in the same period
2	Chile salt peter has the chemical formula;							
	A	$NaNO_3$	B	KNO_2	C	$Na_2B_4O_7$	D	$Na_2CO_3.H_2O$
3	Tincal is the mineral of;							
	A	Al	B	B	C	Si	D	C
4	Which catalyst is used in contact process;							
	A	Fe_2O_3	B	V_2O_5	C	SO_3	D	Ag_2O
5	Hydrogen bond is the strongest bond between the molecule of;							
	A	HF	B	HCl	C	HBr	D	HI
6	The colour of transition metal complexes is due to;							
	A	d-d transition of electrons	B	Paramagnetic nature of transition elements	C	Ionization	D	Loss of S - electrons
7	A double bond consists of;							
	A	Two sigma bonds	B	One sigma and one pi bond	C	One sigma and two pi bonds	D	Two pi bonds
8	Formula of chloroform is;							
	A	CH_3Cl	B	CCl_4	C	CH_2Cl_2	D	$CHCl_3$
9	Which compound is the most reactive one;							
	A	Benzene	B	Ethene	C	Ethane	D	Ethyne
10	Which one the following is not a nucleophile;							
	A	H_2O	B	H_2S	C	BF_3	D	HN_3
11	Rectified spirit contains alcohol about;							
	A	80%	B	85%	C	90%	D	95%
12	Which of the following reacts with both aldehydes and ketones;							
	A	Grignard's reagent	B	Tollen's reagent	C	Fehling's reagent	D	Benedict's reagent
13	A carboxylic acid contains;							
	A	A hydroxyl group	B	A carboxyl group	C	A hydroxyl and a carboxyl group	D	A carboxyl and an aldehydic group
14	Which one of the following enzymes brings about the hydrolysis of fats;							
	A	Urease	B	Maltase	C	Zymase	D	Lipase
15	The reaction between fat and NaOH is called;							
	A	Esterification	B	Hydrogenolysis	C	Fermentation	D	Saponification
16	The word paper is derived from the name of which ready plant;							
	A	Rose	B	Sunflower	C	Papyrus	D	Water Hyacinth
17	Newspaper can be recycled again and again by how many times;							
	A	2	B	3	C	4	D	5

(The End)

CHEMISTRY 019/1

PAPER : PART – II INTERMEDIATE AJK – 12 – 19

MARKS: 68

TIME : 2:40 Hours (SUBJECTIVE PART)

Note:- Attempt any TWENTY TWO (22) short questions in all selecting eight from Q. 2 and Q. 3 each and six from Q. 4. (22 x 2 = 44)

SECTION – I

2- Write short answers of any eight questions. (2 x 8 = 16)

1	What is Doberenier's law of triads?	2	Why diamond is a non-conductor and graphite is fairly a good conductor.
3	Why lime water turns milky with CO_2 but becomes clear with excess of CO_2.	4	Write any two uses of silicones.
5	Write reactions of Aluminium with (a) H_2SO_4 (b) N_2	6	Write any two uses of boric acid.
7	How does nitrogen differs from other elements of its group.	8	Describe 'Ring test' for the confirmation of nitrates.
9	How does aqua regia dissolves gold and platinum.	10	What is the step of digestion for the preparation of pulp?
11	Why wet process is preferable over dry process in preparation of cement.	12	What is the purpose of the process of incineration?

3- Write short answers of any eight questions. (2 x 8 = 16)

1	Write the names and formulae of two heterocyclic compounds.	2	How a Raney Nickle is produced? Give its application?
3	How can you chemically distinguish between propene and propyne?	4	What is wurtz-fitting reaction?
5	Prepare m-chloronitro benzene from benzene?	6	Why alkyl iodides are more reactive than alkyl fluorides?
7	How can you convert $CH_3–CH_2–Mg–Br$ in to $CH_3–CH_2–CH_2–CH_2–OH$	8	Draw a flow sheet diagram for the preparation of methanol?
9	How can you chemically distinguish between isobutyl alcohol and sec. butyl alcohol?	10	Write down two uses of acetic acid.
11	What are essential amino acids? What is their importance?	12	How propanoic acid can be converted into 2 – Aminopropanoic acid?

4- Write short answers of any six questions. (2 x 6 = 12)

1	Why iodine has metallic luster?	2	What is iodized salt?
3	Give reaction equations for the preparation of $Xe O_3$ and $Xe O_4$.	4	Give systematic names to following complexes; (a) $[Fe(CO)_5]$ (b) $K_2[Pt Cl_6]$
5	What is Tollen's test? Give reaction equation.	6	Write any four uses of formaldehyde.
7	What is condensation polymerizations? Give an example with reaction equation.	8	What are simple and compound proteins?
9	What is difference between a fat and an oil?		

SECTION – II

Note:- Attempt any three questions. (8 x 3 = 24)

5- (a) Compare hydrogen with elements of group VII-A on the basis of similarities and dissimilarities. (04)

(b) How sodium hydroxide is prepared by Diaphragm cell. (04)

6- (a) Give two methods of preparation for each of K_2CrO_4 and $K_2Cr_2O_7$. (04)

(b) How is water purified by (04)

(a) Aeration (b) Coagulation

7- (a) Define isomerism, metamerism functional group isomerism cis-trans isomerism with example. (04)

(b) Discuss atomic orbital treatment of benzene. (04)

8- (a) Describe the acidic nature of Alkynes. (04)

(b) Write reaction of Ethanol with (04)

(a) $SOCl_2$ (b) NH_3 (c) Na (d) CH_3COOH

9- (a) Describe S_N2 mechanism of alkyl halides in detail. (04)

(b) What types of aldehydes give cannizzaro's reaction? Give its mechanism. (04)

(The End)