

INTERMEDIATE PART-II (12th CLASS)

CHEMISTRY PAPER-II (NEW SCHEME) GROUP-II MTN-G2-12-1B

TIME ALLOWED: 20 Minutes

OBJECTIVE

MAXIMUM MARKS: 17

Note: You have four choices for each objective type question as A, B, C and D. The choice which you think is correct, fill that bubble in front of that question number. Use marker or pen to fill the bubbles. Cutting or filling two or more bubbles will result in zero mark in that question. Attempt as many questions as given in objective type question paper and leave others blank. No credit will be awarded in case BUBBLES are not filled. Do not solve questions on this sheet of OBJECTIVE PAPER.

Q.No.1

- (1) _____ element is not present in all proteins.
(A) Sulphur (B) Hydrogen (C) Carbon (D) Nitrogen
- (2) Phosphorus helps the growth of:-
(A) Leave (B) Root (C) Seed (D) Stem
- (3) The main pollutant of leather tanneries in the waste water is due to the salt of:-
(A) Chromium (III) (B) Lead (C) Chromium(VI) (D) Copper
- (4) Peroxyacetylnitrate(PAN) is an irritant to human beings and it affects:-
(A) Eyes (B) Ears (C) Stomach (D) Nose
- (5) The ionization energy of Calcium is:-
(A) Lower than that of Barium (B) Lower than that of Magnesium
(C) Higher than that of Beryllium (D) Lower than that of Strontium
- (6) _____ does not belong to Alkaline Earth Metal.
(A) Rn (B) Ba (C) Ra (D) Be
- (7) The chief ore of Aluminium is:-
(A) Na_3AlF_6 (B) $Al_2O_3 \cdot H_2O$ (C) $Al_2O_3 \cdot 2H_2O$ (D) Al_2O_3
- (8) The brown gas formed, when metal reduces HNO_3 to:-
(A) N_2O_3 (B) N_2O_5 (C) NO (D) NO_2
- (9) _____ is the strongest acid in water.
(A) $HClO$ (B) $HClO_2$ (C) $HClO_3$ (D) $HClO_4$
- (10) The strength of binding energy of transition elements depends upon:-
(A) Number of neutrons (B) Number of protons
(C) Number of unpaired electrons (D) Number of electron pairs
- (11) Linear shape is associated with which set of hybrid orbitals:-
(A) dsp^2 (B) sp^3 (C) sp^2 (D) sp
- (12) Vinyl acetylene combines with HCl to form:-
(A) Polyacetylene (B) Benzene (C) Chloroprene (D) Divinylacetylene
- (13) _____ compound is the most reactive one.
(A) Ethene (B) Benzene (C) Ethane (D) Ethyne
- (14) _____ is not a nucleophile.
(A) H_2S (B) H_2O (C) BF_3 (D) NH_3
- (15) Ethanol can be converted into Ethanoic Acid by:-
(A) Hydration (B) Hydrogenation (C) Fermentation (D) Oxidation
- (16) _____ have the highest boiling point.
(A) 2 - Hexanone (B) Propanal (C) Ethanal (D) Methanal
- (17) _____ reagent is used to reduce a Carboxylic group to an alcohol.
(A) $NaBH_4$ (B) H_2 / Pt (C) $LiAlH_4$ (D) H_2 / Ni

INTERMEDIATE PART-II (12th CLASS)

CHEMISTRY PAPER-II (NEW SCHEME) GROUP-II

MTN-G2-12-18

TIME ALLOWED: 2.40 Hours

SUBJECTIVE

MAXIMUM MARKS: 68

NOTE: - Write same question number and its part number on answer book,
as given in the question paper.

SECTION-I

2. Attempt any eight parts.

8 × 2 = 16

- Why are the ionic radius of negative ions larger than the size of their parent atoms?
- Zinc oxide is amphoteric in nature. Explain with reactions.
- How is Gypsum converted into plaster of Paris? Write chemical equation.
- Write the formula of (a) Bauxite (b) Cryolite
- Write the Chemistry of Borax Bead test with an example.
- Why are Silicones preferred to petroleum products as lubricant?
- Write two reactions of NO with (a) $FeSO_4$ (b) H_2S
- Write two reactions of P_2O_5 as dehydrating agent.
- Write two similarities of Oxygen and Sulphur.
- What is the role of Chlorofluorocarbons in destroying ozone? Write reactions.
- How is the quality of water determined by chemical Oxygen demand?
- Define Heterocyclic compounds with two examples.

3. Attempt any eight parts.

8 × 2 = 16

- Give systematic names to following complexes:- (a) $[Fe(CO)_5]$ (b) $[Co(NH_3)_6]Cl_3$
- Give the uses of $KMnO_4$.
- What happens when ter-butyl alcohol is treated with conc. H_2SO_4 ?
- How will you distinguish acetylene and ethene?
- How will you prepare the following compound from Benzene in two steps?
m - chloronitro benzene
- Give the reaction of Ethylene epoxide with ethyl-magnesium bromide.
- Give the four uses of Ethanol.
- How phenol is prepared from Chlorobenzene (Dow's Method)?
- What does happen when Alkaline Sodium nitroprusside solution is added to Ketones?
- How does an Aldehyde react with (a) hydroxylamine (b) Hydrazine
- Write down the four uses of Acetic Acid.
- What are essential and non-essential Amino Acids?

4. Attempt any six parts.

6 × 2 = 12

- Write reactions of H_2SO_4 with $NaCl_{(s)}$ and $NaBr_{(s)}$.
- Justify that Cl_2O_7 is the anhydride of perchloric acid.
- Write important uses of Radon.
- Write note on Polyester resins.
- What is the effect of pH on Enzymes?
- Point out the difference between Glucose and Fructose?
- Write importance of Nitrogen for growth of plant.
- Define Lignin, write its effect on paper.
- Write names of two woody and two non-woody raw materials used for manufacturing of paper.

SECTION-II

NOTE: - Attempt any three questions.

8 × 3 = 24

- What are Hydrides? Give classification of Hydrides with Periodic Trend. 4
 - Describe with diagram the manufacture of Sodium by Down's cell. 4
- Give two methods for the preparation of $K_2Cr_2O_7$, also give its two uses. 4
 - What is Acid Rain? How does it affect our environment? 4
- Define Hybridization and explain the structure of Ethyne according to Hybridization concept. 4
 - What are Friedel-Crafts' reactions? Explain by giving two examples with mechanism. 4
- How will you prepare following from Ethyne (Equations only):- 4
 - Acetaldehyde
 - Benzene
 - Ethane
 - Oxalic acid
 - Write two methods for the preparation of Phenol. 4
- What is β - Elimination? Explain briefly the two possible mechanisms of β - Elimination reactions. 4
 - What type of Aldehydes give Cannizzaro's reaction? Give its Mechanism. 4