



BOARD OF INTERMEDIATE & SECONDARY EDUCATION, HYDERABAD

Excellence-Equity-Empathy
CHEMISTRY-II MODEL PAPER

Time: 02:00 hrs

Class: XII

Marks: 85

Time: 40 Minutes

SECTION-A
MULTIPLE CHOICE QUESTION (MCQ'S)

Marks: 43

Q1. Attempt all MCQ's each MCQ carries equal marks.

- In modern periodic table the d-block elements are in:
(a) A-group (b) Left side (c) B-group (d) Bottom
- Which is the longest period of periodic table:
(a) 4th period (b) 5th period (c) 6th period (d) 7th period
- Which elements are known as outer transition elements:
(a) S and P block elements (b) Only d-block elements
(c) Only f-block elements (d) N.O.T
- Third period of modern periodic table contains:
(a) 18 elements (b) 2 elements (c) 32 elements (d) 8 elements
- The elements of VIII A group are called:
(a) Noble bases (b) Inert gases (c) Zero group elements (d) A.O.T
- Which group elements form polymeric hydrides:-
(a) I A (b) II A (c) III A (d) VII A
- The product of the reaction $\text{NaAlH}_4 + 4\text{H}_2\text{O} \longrightarrow ?$ is:
(a) $\text{NaOH} + 3\text{AlOH}$ (b) $\text{NaOH} + \text{Al}(\text{OH})_3$ (c) $\text{Na AlO}_2 + \text{H}_2$ (d) None of these
- In hydrides the hydrogen atom possesses:
(a) Positive charge (b) Negative charge (c) No any charge (d) N.O.T
- The amount of heat released when one mole of ions of alkali metals is dissolved in water is called:
(a) Heat of hydration (b) Heat of formation (c) Heat of solution (d) All of these
- Na_2CO_3 (washing soda) is prepared by:
(a) Castner Kellner's process (b) Down's process
(c) Ammonia Solvay process (d) N.O.T
- The formula of baking soda is:
(a) NaHCO_3 (b) Na_2CO_3 (c) NaOH (d) A.O.T
- Which is known as Kieserite:
(a) MgSO_4 (b) $\text{MgSO}_4 \cdot \text{H}_2\text{O}$ (c) NaOH (d) NaNO_3
- The total P-block elements are:
(a) 32 (b) 30 (c) 18 (d) 18
- Which element of P-block element is in liquid form:
(a) Chlorine (b) Bromine (c) Mercury (d) A.O.T
- Chlorine is prepared by:
(a) Nelson's cell (b) Castner Kellner's cell
(c) Down's cell (d) A.O.T
- Nitric acid is prepared by:
(a) Ostwald's method (b) Contact process
(c) Bayer's method (d) Down's process
- The first series of transition elements starts from:
(a) Yttrium (b) Lanthanum (c) Scandium (d) Nobelium
- Copper sulphate pent hydrate is also called:
(a) Green vitriol (b) Black vitriol (c) blue vitriol (d) All of these
- A harmful reaction of a metal in which it undergoes slow decay is called:
(a) Corrosion (b) Tin plating (c) Electro-plating (d) A.O.T
- The corrosion is caused by the formation of:
(a) Nitrides (b) Sulphide (c) Oxides (d) Chlorides
- The transition metal which possesses unpaired electrons is called:
(a) Diamagnetic (b) paramagnetic (c) Both a & b (d) N.O.T

22. The $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ dissolved in excess of ammonia shows color:
 (a) Dark green (b) Dark red (c) Dark blue (d) N.O.T
23. 1000 kg of coal tar yields the benzene about:
 (a) 2-3kg (b) 1-3kg (c) 1-2kg (d) 3-4kg
24. In Latin the word petroleum means:
 (a) Rock oil (b) Cracked oil (c) N.O.T (d) A.O.T
25. The monomers used in Bakelite polymer are:
 (a) Toluene and formaldehyde (b) Benzene and formaldehyde
 (c) Phenol and formaldehyde (d) Acetone and formaldehyde
26. Furan and Thiophene are examples of:
 (a) Heterocyclic compounds (b) Homo-cyclic compounds
 (c) Monocyclic compounds (d) Tri-cyclic compounds
27. Pentane (C_5H_{12}) shows the isomers:
 (a) n-pentane (b) iso-pentane (c) neo-pentane (d) A.O.T
28. The I.U.P.A.C name of : $\text{H}_3\text{C} - \overset{\text{O}}{\parallel}{\text{C}} - \text{CH}_3$ is:-
 (a) Dimethyl ketone (b) Acetone
 (c) 2-propanone (d) A.O.T
29. The structure of Acetylene is:
 (a) Tetrahedral (b) Trigonal (c) Linear (d) Pyramidal
30. The bond angle in ethane is:
 (a) 90.5° (b) 120° (c) 180° (d) 360°
31. The double bonds in benzene are:
 (a) Localized (b) Delocalized (c) Unstable (d) N.O.T
32. The reaction in which single bonds are converted into double or triple bonds is called:
 (a) Addition reaction (b) Substitution reaction
 (c) Elimination reaction (d) Rearrangement reaction
33. De-hydro halogenation is a reaction of:
 (a) Addition of H_2O (b) Elimination of HX (c) Addition of HX (d) Elimination of H_2O
34. Ethylene glycol is formed by the oxidation of:
 (a) Ethane (b) Ethyne (c) Ethylene (d) Propylene
35. When phenol is treated with red hot zinc dust it yields:
 (a) Toluene (b) Benzene (c) Picric acid (d) Xylene
36. The rate of SN^1 reaction depends on the concentration of:
 (a) Substrate (b) Nucleophile (c) Both a & b (d) A.O.T
37. Which one is Oxonium ion:
 (a) $\text{R} - \overset{+}{\text{O}} - \text{R}$ (b) H_3C^+ (c) $\bar{\text{O}}\text{H}$ (d) N.O.T
38. The carbohydrates which can not be further hydrolyzed are called:
 (a) Monosaccharide (b) Di-saccharides
 (c) Polysaccharides (d) A.O.T
39. A class of protein which catalyze all types of biochemical reactions is called:
 (a) Vitamins (b) Lipids (c) Globulin protein (d) Enzymes
40. The mixture of sodium and calcium silicates is used to manufacture:
 (a) Ordinary glass (b) Pyrex glass (c) Colored glass (d) A.O.T
41. The position of hydrogen atom in modern periodic table is in:
 (a) IA Group (b) IV A Group (c) VII A Group (d) N.O.T
42. Alkali metals are the elements of group:
 (a) IIIA (b) IIA (c) IA (d) VIII A
43. A compound having a bond angle 180° is:
 (a) Alkane (b) Alkene (c) Alkyne (d) Cycloalkane

The End



BOARD OF INTERMEDIATE & SECONDARY EDUCATION, HYDERABAD

Excellence-Equity-Empathy
CHEMISTRY-II MODEL PAPER

Class: XII

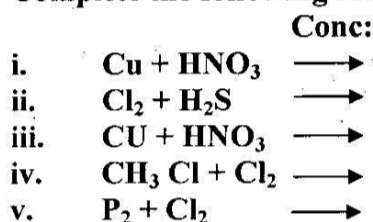
Marks: 80

SECTION-B
Section-B (Short Questions)

Marks: 24

Note: Attempt any SIX questions each question carries 04 marks.

- Q2. What are the main features of periodic classification of elements?
Q3. Discuss briefly the position of hydrogen in periodic table?
Q4. Write a brief note on isomerism?
Q5. Complete the following reactions.



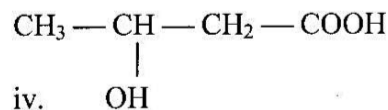
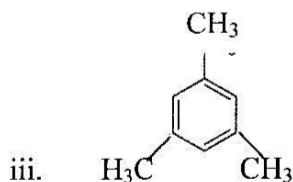
- Q6. Write short note on "Corrosion".
Q7. Discuss the structure of Ethyne?
Q8. Write the reaction mechanism of SN^1 reaction.
Q9. What do you mean by monohydric, di-hydric and Tri-hydric alcohols? Give two examples of each class.
Q10. Explain addition reaction with example.

SECTION-C
(Long Questions)

Marks: 18

Note: Attempt any TWO questions each question carries equal marks.

- Q11. What do you know about glass? Describe in detail.
Q12. What are carbohydrates? Discuss the classification based on taste.
Q13(a) Name the following compounds according to I.U.P.A.C system



Q13(b). Draw the structure of following compounds.

- i. Naphthalene ii. Phenyl Hydrazine
iii. Picric acid iv. Vinyl chloride
v. Iso-butyl bomide

The End