ZIAUDDIN UNIVERSITY
EXAMINATION BOARD

CHEMISTRY THEORY CLASS IX

TIME: 2 Hours

TOTAL 60 MARKS **SECTION A (30MARKS)**

THIS SECTION CONSISTS OF 30 MULTIPLE CHOICE QUESTIONS. EACH QUESTION CARRIES ONE MARK.

1. _____ is the branch of science which deals with matter and its chemical composition.
a) Physics b) Biology
c) Chemistry d) Health Science
2. _____is branch of chemistry that deals with polymerization process and polymer compounds.
a) Inorganic Chemistry b) Organic Chemistry
c) Polymeric Chemistry d) Bio Chemistry
3. Different samples of the same compounds always contain the same elements combines together in the
same proportion by mass. Law is known as:
(a) Law of definite proportion (b) Law of conservation of mass
(c) Law of Multiple proportion (d) Law of Reciprocal proportion
4. 18 a.m.u of H 2 O is equal to
(a) Molar mass (b) Atomic mass (c) Molecular mass (d) Mass number
5. _____ is the reaction in which two or more substances combine together to form a single substance.
(a) Combustion reaction (b) Displacement Reaction
(c) Decomposition reaction (d) Addition Reaction
6. A change which alters the composition of a substance is called _____.
(a) Combustion reaction (b) Decomposition reaction

(c) Chemical Reaction (d) Addition Reaction
7. The reaction Zn + 2HCl ⟶ ZnCl 2 + H 2 (g) is the _____ replacement reaction.
(a) Single (b) Double (c) Triple (d) Half
7. 6 moles of H 2 O are equal to:
(a) 80 g (b) 108 g (c) 100 g (d) 108 a.m.u.
8. The elements of group VIIIA are known as:
(a) Noble Gases (b) Active gases
(c) Halogens (d) None of above
9. What are Alkali metals:
(a) IA groups (b) IV A group (c) VA groups (d) VII A group
10. The electronegativity of elements in a group of periodic table decreases from top to bottom because of:
(a) Increase in atomic size (b) Decrease in atomic size
(c) Increase in atomic number (d) None of these

11. The incomplete period in the periodic table is _____.
(a) 7 (b) 6 (c) 3 (d) 1
12. Atomic Number of Sodium is _____.
(a) 13 (b) 7
(c) 11 (d) 16

13. _____ is the sum of the number of protons and number of neutrons in the nucleus.
(a) Mass Number (b) Atomic Number
(c) Number of Neutron (d) Number of Proton
14. Third orbit can have a maximum number of _____ electrons.
(a) 20 (b) 18
(c) 9 (d) 8
15. The maximum number of electrons in the given shell is governed by the formula:
(a) 2n 2 (b) 4n 2
(c) 3n 2 (d) n 2
16.If an atom contains 11 electrons, 11 protons & 12 neutrons, What would be its mass number?
(a) 23 (b)52
(c) 15 (d)17
17. The circular path of an electron around the nucleus is:
a) Atom (b) Orbit
c) Proton d) None of these
18. Number of moles of solute dissolve in 1000 gm (1Kg) of solvent is called:
(a) Molarity (b) Molality (c) Solubility (d) Normality
19. Which of the following does not have unit?
(a) Molartiy (b) Molality (c) Solubility (d) Mole fraction
20. When water is taken as a solvent, then the solution is taken as
(a) Saturated Solution (b) Un Saturated solution (c) Aqueous Solution (d) None of the above
21. All metals are:
(a) Electrolytes (b) Conductors (c) Non Conductors (d) both a and b
22.One Faraday is equivalent to _____ coulomb.
(a) 96,600 (b) 96,500 (c) 96,400 (d) 96,000
23. The substances whose aqueous solution changes the blue litmus to red.
(a) Acids (b) Bases (c) Neutral (d) Salts
24. Salts that formed by the reaction of strong acid with weak base are:
(a) Neutral (b) Acidic (c) Basic (d) Normal
25. Salts that formed by the reaction of weak acid with strong base are:
(a) Acidic (b) Basic (c) Neutral (d) Normal
26. The solution whose H+ ion concentration is 1□10 -4 M, then its P H is _____.
(a) 4 (b) -4 (c) 7 (d) 14
27. If H + ion concentration of a solution is 1□10 -14 M, the solution is _____.
(a) Acidic (b) Basic (c) Normal (d) None of these
28. The force which holds atoms together in a molecular or crystal is called:
(a) Ionic Bond (b) Covalent Bond
(c) Co-ordinate Covalent (d) Chemical Bond
29. The bond which is formed by one sided sharing of electrons is called:
(a) Ionic Bond (b) Covalent Bond
(c) Co-ordinate Covalent (d) Chemical Bond
30. The power of an atom to attract the shared pair of electrons towards itself is called:
(a) Electro positivity (b) Electron Affinity
(c) Electro negativity (d) None of these

SECTION B (SHORT ANSWER QUESTIONS) (18 MARKS)

ATTEMPT ANY 6 SHORT QUESTIONS. ALL QUESTIONS CARRY 3 MARKS.

2-Define chemistry. Name few branches of chemistry.

3-Calculate the molecular mass (in a.m.u) of each of the following substances.

- H20
- C2H6
- H2O2
- C2H60

4-The formula for rust is Fe203. How many moles of Fe are present in 30g of rust?

5-What is the modern periodic law. Name the elements of the Lithium family.

6-State 3 differences between covalent bond and co ordinate covalent bond.

7-Calculate the molarity of a solution containing 16g glucose per 300ml solution.

8-Define PH of the solution and calculate the pH of 0.001 M of HCL.

9-Balance the following equations.

___ C+ ___ O 2 ?___ CO

___ FeCl 3 + ___ NaOH ?___ Fe(OH) 3 + ___NaCl

___ P + ___O 2 ?___P 2 O5

___ Na + ___ H 2 O ?___ NaOH + ___H 2

___ Ag 2 O ?___ Ag + ___O 2

___ S+ ___O 2 ?___ SO 3

10-State Faraday's First and Second law of electrolysis.

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SECTION C (DESCRIPTIVE-ANSWER QUESTIONS) (12 MARKS)

Attempt any 2 questions from this section. Each question carries 6 marks

1. What is a covalent bond? Explain the types of covalent bond and their characteristics.

2 Explain Rutherford's Gold Metal foil experiment.

3. Name the laws of chemical combination and write a note on any of them.

4 State the properties of group V A and VI A