

YEKA SUBCITY EDUCATION OFFICE (A.A)
GRADE 12 CHEMISTRY MODEL EXAMINATION
GINBOT 2013/MAY 2021

TIME ALLOWED 2:30 HRS

GENERAL DIRECTIONS

IN THIS EXAMINATION, THERE ARE A TOTAL OF 80 MULTIPLE CHOICE QUESTIONS. CAREFULLY SELECT THE BEST ANSWER AND WRITE ONLY THE LETTER OF YOUR CHOICE ON THE ANSWER SHEET PROVIDED.

YOU MAY REFER TO THE INFORMATION GIVEN BELOW WHENEVER IS NECESSARY

PHYSICAL CONSTANTS

1. Mass of Electron = $9.11 \times 10^{-31} \text{ kg}$
2. Gas constant, $R = 8.314 \text{ J/mol K} = 0.0821 \text{ L.atm/mol.K}$
3. Avogadro's number = $6.023 \times 10^{23} \text{ mol}^{-1}$
4. Planck's constant, $h = 6.626 \times 10^{-34} \text{ Js/photon}$
5. Faraday's constant, $F = 96,500 \text{ C.mol}^{-1}$
6. Rydberg's constant, $R_H = 2.18 \times 10^{-18} \text{ J} = 1.097 \times 10^7 \text{ m}^{-1}$
7. Velocity of light, $C = 3 \times 10^8 \text{ ms}^{-1}$
8. 1 joule = $1 \text{ kg m}^2/\text{s}^2$
9. 1 Ångstrom = $1 \times 10^{-10} \text{ m}$
10. 1 atm = 760 torr 11. Density of water = 1 g/cm^3

ELEMENT	H	He	Li	Be	B	C	N	O	F	Ne	Na	Mg	Al
ATOMIC NUMBER(Z)	1	2	3	4	5	6	7	8	9	10	11	12	13
MASS NUMBER(A)	1	4	7	9	10.8	12	14	16	19	20	23	24	27

ELEMENT	Si	P	S	Cl	Ar	K	Ca	Cr	Ni	Cu	Br	Mo	I
ATOMIC NUMBER(Z)	14	15	16	17	18	19	20	24	28	29	35	42	53
MASS NUMBER(A)	28	31	32	35.5	39.95	39	40	52	58.7	64.5	80	95.9	127

1. What is the scientific notation of 4,610,000 with 2 significant figures?

- (A) 5×10^6 (B) 4.61×10^6 (C) 4.6×10^6 (D) 4.610×10^6

2. A gas cylinder having a volume of 10.5L contains 36.8g of gas. What is the density of the gas in kg/m^3 ?

- (A) 3.50 (B) 0.28 (C) 2.8 (D) 35

3. Which of the following properties of a substance **does NOT** represent an intensive physical property?

- (A) Color (B) Melting point (C) Conductivity (D) Area

4. At what temperature is the temperature in degrees Fahrenheit equal to twice the temperature in degrees Celsius?

- (A) 160°C (B) 60°C (C) 70°C (D) 125°C

5. Which of the following statements is correct?

- (A) one meter has about the same length as a yard
- (B) A scientific notation for 0.00035 is 3.5×10^{-3}
- (C) The prefix giga means multiplied by 1,000,000
- (D) A substance with density 0.80 g/cm^3 floats in water

6. Which one of the following is **NOT** allowed in the chemistry laboratory?

- (A) Knowing the hazards of the material being used
- (B) Wearing any type of cloth and shoe
- (C) Reading the labels on the reagent bottles carefully
- (D) Tie back loose hair

7. Which of the following radiation has the largest wave length?

- (A) UV
- (B) IR
- (C) Micro wave
- (D) Visible

8. What did Rutherford conclude from the experiments he carried out in which a beam of alpha particles was directed at a thin piece of metal foil?

- (A) electrons travel in circular orbit around the nucleus
- (B) the positively charged parts of atoms are moving about with a velocity approaching the speed of light
- (C) the diameter of an electron is approximately equal to that of the nucleus
- (D) the positively charged parts of atoms are extremely small and extremely heavy particles

9. The Pauli exclusion principle

- (A) tells the energy of an electron
- (C) describes the position in space of an electron
- (B) limits the number of electrons in an orbital to two
- (D) tells the shape of an electron

10. For which one of the following elements is Hund's rule **Not** used in writing the electron Configuration?

- (A) Na
- (B) C
- (C) N
- (D) P

11. Which one of the following sets of quantum numbers could be those of the last electron of Molybdenum (Mo)?

- (A) $n=4, l=0, m_l=0, m_s=+1/2$
- (C) $n=5, l=0, m_l=0, m_s=+1/2$
- (B) $n=4, l=2, m_l=-1, m_s=-1/2$
- (D) $n=3, l=2, m_l=0, m_s=+1/2$

12. Which of the following electron transitions requires the largest energy to be absorbed by the hydrogen atom?

- (A) from $n=3$ to $n=4$
- (B) from $n=1$ to $n=2$
- (C) from $n=4$ to $n=5$
- (D) from $n=5$ to $n=6$

13. A visible light radiation has a frequency of 6×10^{14} Hz .What is its wave length in nanometer (nm)?
 (A) 200nm (B) 300nm (C) 400nm (D) 500nm
14. An electron in a Bohr hydrogen atom has energy of -1.362×10^{-19} J . The value of n for this electron is—— (A) 5 (B) 2 (C) 3 (D) 4
15. What is the amount of energy (the quantum of energy) that an object can absorb from yellow light ,whose wave length is 600 nm?
 (A) 3.313×10^{-19} J (B) 3.33×10^{-19} J (C) 3.313×10^{-20} J (D) 3.33×10^{-20} J
16. An electromagnetic wave with low frequency would have relatively ——.
 (A) high energy and a short wavelength (C) low energy and a long wavelength
 (B) high energy and a long wavelength (D) low energy and a short wavelength
17. Light is given off by sodium or mercury containing street light you see arises for which of the following reason:
 (A) electrons moving from a given quantum level to a higher n
 (B) electrons moving from a given quantum level to one of lower n
 (C) electrons being removed from the atom, thereby creating a cation
 (D) cannot be determined
18. Which type of bond is formed when electropositive elements (with low ionization energy, mostly metals) react with electronegative elements (with high electron affinity, mostly non-metals)?
 (A) A covalent bond (B) Metallic bond (C) An ionic bond (D) Dative bond
19. What type of hybridization is used by carbon in C_3H_6 ?
 (A) sp^3 (B) sp^2 (C) sp (D) sp^3d^2
20. According to the molecular orbital theory the species with highest bond order is
 (A) Li_2 (B) O_2 (C) F_2 (D) Ne_2
21. The change in energy that occurs when an ionic solid is separated in to isolated ions in the gas phase is:
 (A) Lattice energy (B) ionization energy (C) activation energy (D) hydration energy
22. Which one of the following is intramolecular forces?
 (A) Hydrogen bond (B) Dipole-dipole force (C) Ionic bond (D) London force
23. A pi bond can be formed by the overlap of two orbitals. What are they?
 (A) s and p (B) s and s (C) sp^2 and p (D) p and p

24. Which of the following is correct about the bond angle and polarity of SiCl_3Br ?
 (A) 90° , polar (B) 109° , polar (C) 109° , non-polar (D) 120° , polar
25. Which of the following statement is true?
 (A) single bond < double bond < triple bond in bond length
 (B) a triple bond contains two sigma(δ) and one pi(π) bonds
 (C) single bond < double bond < triple bond in bond strength
 (D) a single bond contains only one pi(π) bond.
26. What is H-N-H bond angle in the three species NH_2^- , NH_3 and NH_4^+ ?
 (A) $109^\circ, 107^\circ, 105^\circ$, respectively (C) $107^\circ, 105^\circ, 109^\circ$, respectively
 (B) $105^\circ, 107^\circ, 109^\circ$, respectively (D) $109^\circ, 105^\circ, 107^\circ$, respectively
27. In a molecule ICl_3 , the arrangement of electron pairs would be described as:
 (A) Trigonal bipyramidal (C) square pyramidal
 (B) octahedral (D) square planar
28. In which of the following species are the diatomic molecules arranged in order of increasing bond length?
 (A) $\text{F}_2, \text{Cl}_2, \text{ICl}, \text{BrCl}, \text{I}_2$ (C) $\text{F}_2, \text{BrCl}, \text{Cl}_2, \text{I}_2, \text{ICl}$
 (B) $\text{F}_2, \text{Cl}_2, \text{BrCl}, \text{ICl}, \text{I}_2$ (D) $\text{F}_2, \text{Cl}_2, \text{BrCl}, \text{I}_2, \text{ICl}$
29. In which series are compounds arranged in order of decreasing ionic character?
 (A) $\text{NaI} > \text{NaBr} > \text{NaCl} > \text{NaF}$ (C) $\text{NaI} > \text{NaBr} > \text{NaF} > \text{NaCl}$
 (B) $\text{NaBr} > \text{NaI} > \text{NaCl} > \text{NaF}$ (D) $\text{NaF} > \text{NaCl} > \text{NaBr} > \text{NaI}$
30. What is the unit of the rate constant for a reaction of order $3/2$?
 (A) s^{-1} (B) $\text{L} \cdot \text{mol}^{-1} \cdot \text{s}^{-1}$ (C) $\text{mol}^{-1/2} \cdot \text{L}^{1/2} \cdot \text{s}^{-1}$ (D) $\text{L}^{-1} \cdot \text{mol} \cdot \text{s}^{-1}$
31. Which of the following is the correct expression for the rate of the reaction
 $2\text{N}_2\text{O}_5(\text{g}) \longrightarrow 4\text{NO}_2(\text{g}) + \text{O}_2(\text{g})$, in terms of N_2O_5 ?
 (A) $\frac{\Delta[\text{N}_2\text{O}_5]}{\Delta t}$ (B) $4\frac{\Delta[\text{N}_2\text{O}_5]}{\Delta t}$ (C) $\frac{\Delta[\text{N}_2\text{O}_5]}{2\Delta t}$ (D) $\frac{-1\Delta[\text{N}_2\text{O}_5]}{2\Delta t}$
32. One of the steps in the manufacture of nitric acid is the oxidation of ammonia shown in this equation:
 $4\text{NH}_3(\text{g}) + 5\text{O}_2(\text{g}) \longrightarrow 4\text{NO}(\text{g}) + 6\text{H}_2\text{O}(\text{g})$
 If gaseous water appears at a rate of $0.025 \text{ M} \cdot \text{min}^{-1}$, at what rate does oxygen disappear?
 (A) $0.0040 \text{ M} \cdot \text{min}^{-1}$ (B) $0.021 \text{ M} \cdot \text{min}^{-1}$ (C) $0.038 \text{ M} \cdot \text{min}^{-1}$ (D) $0.150 \text{ M} \cdot \text{min}^{-1}$

33. Nitric oxide, NO, reacts with hydrogen to give nitrous oxide, N₂O, and water



In a series of experiments, the following initial rates of disappearance of NO were obtained:

Experiment Number	Initial concentrations		Initial rate
	[NO]	[H ₂]	
1	6.4x10 ⁻³ M	2.2x10 ⁻³ M	2.6x10 ⁻⁵ M/s
2	12.8x10 ⁻³ M	2.2x10 ⁻³ M	1.0x10 ⁻⁴ M/s
3	6.4x10 ⁻³ M	4.5x10 ⁻³ M	5.1x10 ⁻⁵ M/s

What is the rate law?

- (A) $r = k[\text{NO}]^2[\text{H}_2]$ (B) $r = k[\text{NO}][\text{H}_2]$ (C) $r = k[\text{NO}][\text{H}_2]^2$ (D) $r = k[\text{NO}]^2[\text{H}_2]^2$

34. If we doubled the concentration of a reactant, the rate increases by four times, the reaction is

- (A) First order (B) Second order (C) Third order (D) Zero order

35. Which of the following is true about the factors affecting rate of reaction?

- (A) As surface area of solid reactants increases, the rate of the reaction also increases
(B) As concentration of reactants increases, the rate of any order of reaction increases
(C) As temperature increases, the rate of gaseous reaction also increases
(D) A catalyst always speed up the rate of the reaction.

36. Which of the following is true for a chemical reaction at equilibrium?

- (A) only the forward reaction stops
(B) only the reverse reaction stops
(C) both the forward and the reverse reaction stop
(D) the rates of the forward reaction and reverse reactions are equal

37. The equilibrium constant for the formation of hydrogen iodide from hydrogen and iodine is 45 at certain temperature.



Which of the following is true regarding this equilibrium?

- I. The reaction is product favored III. Equilibrium lies far to the right
II. The reaction is reactant favored IV. Equilibrium lies far to the left
(A) I and III (B) I and IV (C) II and III (D) II and IV

38. For the reaction $2A + B \longrightarrow 2C$ the appropriate form for the equilibrium constant expression is
- (A) $[A][B]^2/[C]$ (C) $[C]^2/[A]^2[B]$
 (B) $[A]^2[B]/[C]^2$ (D) $[A][B]^2/[C]$
39. For the chemical equilibrium $A + 2B \rightleftharpoons 2C$, the value of the equilibrium constant, K is 10. What is the value of equilibrium constant for the reverse reaction?
- (A) 0.10 (B) 10 (C) 1 (D) 100
40. Which of the following occurs when products are added to a chemical reaction in solution or the gas phase at equilibrium?
- (A) Q increases, so the equilibrium shifts to produce more products.
 (B) Q increases, so the equilibrium shifts to produce more reactants.
 (C) Q decreases, so the equilibrium shifts to produce more products
 (D) Q decreases, so the equilibrium shifts to produce more reactants
41. Reaction of an ester with a strong base is called
- (A) Esterification. (B) Oxidation. (C) Saponification. (D) Condensation.
42. The basic difference between **fats** and **oils** is that
- (A) Oils are liquids whereas fats are solids at ordinary temperature
 (B) Oils are insoluble in water whereas fats are soluble in water
 (C) Fats can be changed to oils by hydrogenation whereas Oils do not be changed into Fats
 (D) Oils are tri-esters whereas fats are fatty acids
43. The phrase "like dissolves like" refers to the fact that _____.
- (A) Polar solvents dissolve nonpolar solutes and vice versa
 (B) Solvents can only dissolve solutes of similar molar mass
 (C) Gases can only dissolve other gases
 (D) Polar solvents dissolve polar solutes and nonpolar solvents dissolve nonpolar solutes
44. A sample of potassium nitrate (49.0 g) is dissolved in 100 g of water at 100°C , with precautions taken to avoid evaporation of any water. The solution is cooled to 30.0°C and no precipitate is observed. This solution is _____.
- (A) Supersaturated (B) Unsaturated (C) Saturated (D) Hydrated
45. Which one of the following concentration units varies with temperature?
- (A) molality (C) mass percent
 (B) mole fraction (D) molarity

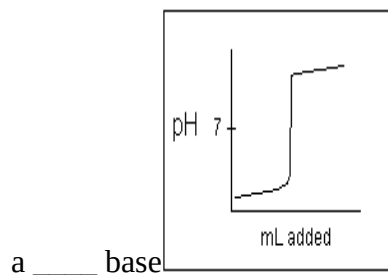
46. A solution contains 28% phosphoric acid by mass. This means that _____.
 (A) The density of this solution is 2.8 g/mL
 (B) 1 mL of this solution contains 28 g of phosphoric acid
 (C) 100 g of this solution contains 28 g of phosphoric acid
 (D) 1 L of this solution has a mass of 28 g
47. The concentration of a benzene solution prepared by mixing 12.0 g C₆H₆ with 38.0 g CCl₄ is _____ molal.
 (A) 0.622 (B) 0.316 (C) 0.508 (D) 4.04
48. The phenomenon used to differentiate colloids and true solutions is called the _____ effect.
 (A) Tyndal (B) Osmotic (C) Raoult (D) van,t Hoff
49. Which of the following is applicable for the solubility of gases in a liquid?
 (A) Increases with an increases in temperature and pressure
 (B) Decreases with an increases in temperature and pressure
 (C) Increases with decrease in temperature and increases as pressure increases
 (D) Increases with an increase in temperature and decreases as pressure increases
50. You are given a bottle of solid X and three aqueous solutions of Y, the first saturated, the second unsaturated and the third supersaturated. Which of the following is **NOT** correct, if you add a small amount of the solid solute to each solution?
 (A) The solution in which the added solute grows in size is a supersaturated solution.
 (B) The solution in which the solid solute dissolves is unsaturated.
 (C) The solution in which the solid solute dissolves is saturated.
 (D) The solution in which the solid solute remains unchanged in size is saturated
51. What is the molarity of sodium chloride in solution that is 13.0% by mass sodium chloride and that has a density of 1.10 g/mL? (A) 2.23 (B) 143 (C) 2.4 (D) 2.5
52. The spectator ion(s) in the following reaction is/are:

$$\text{Na}_2\text{CO}_3(\text{aq}) + \text{Ba}(\text{NO}_3)_2(\text{aq}) \rightleftharpoons \text{BaCO}_3(\text{s}) + 2\text{NaNO}_3(\text{aq})$$

 (A) Na⁺ and Ba²⁺ (C) CO₃²⁻ and NO₃⁻
 (B) Na⁺ and NO₃⁻ (D) Ba²⁺ and CO₃²⁻
53. Which of the following is NOT a colligative property of a solution?
 (A) Boiling point elevation (C) Vapour pressure lowering
 (B) Freezing point depression (D) Solution saturation

54. What would be the boiling point of 2.00m solution of sucrose ($C_{12}H_{22}O_{11}$) in water at 1atm?
(K_b for $H_2O=0.51^{\circ}C/m$, boiling point of $H_2O=100^{\circ}C$)
(A)101.02 $^{\circ}C$ (B)100.5 $^{\circ}C$ (C)101.5 $^{\circ}C$ (D)102.0 $^{\circ}C$
55. What is the $[H^+]$ of a 0.075 M solution of the acid HA if the Equilibrium Constant, K_a for HA is 4.8×10^{-8} ?
(A) $6.1 \times 10^{-4} M$ (B) $2.2 \times 10^{-4} M$ (C) $6.0 \times 10^{-5} M$ (D) $4.8 \times 10^{-8} M$
56. Which of the following combinations **cannot** produce a buffer solution?
(A) HNO_2 and $NaNO_2$ (C) $HClO_4$ and $NaClO_4$
(B) HCN and $NaCN$ (D) NH_3 and $(NH_4)_2SO_4$
57. Calculate the pH of the solution resulting from the addition of 20.0 mL of 0.100 M NaOH to 30.0 mL of 0.100 M HNO_3 . ($\log 2=0.3$)
(A) 1.35 (B) 1.70 (C) 1.95 (D) 2.52
58. Consider the titrations of the pairs of aqueous acids and bases listed. For which pair is the P^H at the equivalence point is stated incorrectly?
- | <u>Acid-Base pair</u> | <u>P^H at equivalence point</u> |
|------------------------|--|
| (A) $HCl + NH_3$ | Less than 7 |
| (B) $HNO_3 + Ca(OH)_2$ | Equal to 7 |
| (C) $HClO_4 + NaOH$ | Equal to 7 |
| (D) $HCl + NaOH$ | Less than 7 |
59. Which of the following salts give acidic aqueous solutions?
1. KNO_3 2. KCH_3OO 3. NH_4NO_3 4. RbI
5. $(NH_4)_2 SO_4$ 6. $BaCl_2$ 7. $NaCN$ 8. KNO_2
(A) 2,7,8 (B) 3,5 (C) 2,4,6 (D) 1,4,7,8
60. The conjugate acid of HSO_4^- is
(A) H^+ (B) H_2SO_4 (C) HSO_4^+ (D) SO_4^{2-}
61. The base-dissociation constant, K_b , for pyridine, C_5H_5N , at $25^{\circ}C$ is 1.4×10^{-9} . The acid-dissociation constant, K_a , for the pyridinium ion, $C_5H_5NH^+$, is _____.
(A) 7.1×10^{-6} (B) 1.4×10^{-5} (C) 1.0×10^{-7} (D) 1.4×10^{-23}
62. Calculate the ratio $[CH_3COOH]/[NaCH_3COO]$ that gives a solution with $pH = 5.00$?
(K_a for $CH_3COOH=1.8 \times 10^{-5}$, $\log 1.8=0.26$)
(A) 0.28 (B) 0.36 (C) 0.44 (D) 0.56

63. The following titration curve is the kind of curve expected for the titration of a ____ acid with



- (A) Strong, strong (B) weak, strong (C) strong, weak (D) weak, weak

64. B is a weak base. Which equilibrium corresponds to the equilibrium constant K_a for HB^+ ?

- (A) $HB^+(aq) + H_3O^+(aq) \rightleftharpoons H_2B^{2+}(aq) + H_2O(l)$
 (B) $B(aq) + H_2O(l) \rightleftharpoons HB^+(aq) + OH^-(aq)$
 (C) $HB^+(aq) + OH^-(aq) \rightleftharpoons B(aq) + H_2O(l)$
 (D) $HB^+(aq) + H_2O(l) \rightleftharpoons B(aq) + H_3O^+(aq)$

65. Consider a solution which is 0.10 M in CH_3COOH and 0.20 M in $NaCH_3COO$. Which of the following statements is **true**?

- (A) If a small amount of NaOH is added, the pH decreases very slightly.
 (B) If NaOH is added, the OH^- ions react with the CH_3COO^- ions.
 (C) If a small amount of HCl is added, the pH decreases very slightly.
 (D) If HCl is added, the H^+ ions react with CH_3COOH ions.

66. A system that allows matter and energy exchange with the surroundings is called _____ system

- (A) Closed (B) Open (C) Isolated (D) isobaric

67. A molecule or an ion is classified as a Lewis acid if it

- (A) accepts proton from water
 (B) accepts a pair of electrons to form a bond
 (C) donates a pair of electrons to form a bond
 (D) donates a proton to water

68. The thermodynamic quantity that expresses the degree of disorder in a system is.....

- (A) enthalpy (B) bond energy (C) internal energy (D) entropy

69. A sample of aluminum metal absorbs 9.86 J of heat, upon which the temperature of the sample increases from 23.2°C to 30.5°C. Since the specific heat capacity of aluminum is 0.90 J/g-K, the mass of the sample is _____ g.
- (A) 72 (B) 8.1 (C) 1.5 (D) 65
70. A reducing agent is
- (A) Reduced as it loses electrons (C) Oxidized as it gains electrons
(B) Reduced as it gains electrons (D) Oxidized as it loses electrons
71. Consider the reaction: $\text{Bi}(\text{OH})_3 + \text{SnO}_2^- \rightleftharpoons \text{Bi} + \text{SnO}_3^{2-}$.
The above equation is balanced in basic medium. What is the coefficient of SnO_2^-
- (A) 3 (B) 2 (C) 1 (D) 4
72. Chromium often is electroplated on other metals and even plastics to produce a shiny metallic appearance. How many grams of chromium would plate out from a solution of $\text{Cr}(\text{NO}_3)_2$ when 10 amperes of current are passed through the electrolytic cell for 50 minutes?
- (A) 5.4g (B) 3.6g (C) 10g (D) 8g
73. during electroplating in an electrolytic cell
- (A) The plating metal is used as anode (C) The electrolyte is a salt of the metal to be plated
(B) The metal to be plated is used as anode (D) The plating metal is used as cathode
74. Electrolytic cells are
- (A) Non-spontaneous changes, with a negative anode and a positive cathode
(B) Non-spontaneous changes, with a positive anode and a negative cathode
(C) Spontaneous changes, with a negative anode and a positive cathode
(D) Spontaneous changes, with a positive anode and a negative cathode
75. What is E^0_{cell} for the following balanced reaction?
- $$\text{Zn(s)} + \text{Pb}^{2+}(\text{aq}) \rightleftharpoons \text{Zn}^{2+}(\text{aq}) + \text{Pb(s)}$$
- $\text{Zn}^{2+}/\text{Zn } E^0_{\text{red}} = -0.763$
 $\text{Pb}^{2+}/\text{Pb } E^0_{\text{red}} = -0.126$
- (A) 1.274V (B) +0.889V (C) -0.637V (D) +0.637V
76. Give the line notation for a cell that reduces CuSO_4 to Cu and oxidizes Zn to Zn^{2+} .
- (A) $\text{Cu(s)} | \text{Cu}^{2+}(\text{aq}) || \text{Zn}^{2+}(\text{aq}) | \text{Zn(s)}$
(B) $\text{Zn(s)} | \text{Zn}^{2+}(\text{aq}) || \text{Cu}^{2+}(\text{aq}) | \text{Cu(s)}$
(C) $\text{Zn(s)} | \text{Zn}^{2+}(\text{aq}), \text{SO}_4^{2-}(\text{aq}) || \text{Cu}^{2+}(\text{aq}), \text{SO}_4^{2-}(\text{aq}) | \text{Cu(s)}$
(D) $\text{Cu(s)} | \text{Cu}^{2+}(\text{aq}), \text{SO}_4^{2-}(\text{aq}) || \text{Zn}^{2+}(\text{aq}), \text{SO}_4^{2-}(\text{aq}) | \text{Zn(s)}$

77. The second most abundant element in the earth's crust is.....

- (A) Si (B) O (C)Ca (D) Al

78. Which one of the following element is found in native state?

- (A)Na (B)K (C)Pt (D)Mg

79. Which one of the following **is Not** synthetic polymer?

- (A)Teflon (B)Cellulose (C)Polyethylene (D)Perspex

80. What is the type of linkage that chemically connects the sub units of carbohydrates?

- (A) Amide linkage (C) Glycosidic linkage
(B)Peptide linkage (D) Amine linkage

ANSWER SHEET FOR GRADE 12CHEMISTRY MODEL EXAMINATION(MAY 2013 E.C)

NAME.....SEC.....NO.....

1		11		21		31		41		51		61		71	
2		12		22		32		42		52		62		72	
3		13		23		33		43		53		63		73	
4		14		24		34		44		54		64		74	
5		15		25		35		45		55		65		75	
6		16		26		36		46		56		66		76	
7		17		27		37		47		57		67		77	
8		18		28		38		48		58		68		78	
9		19		29		39		49		59		69		79	
10		20		30		40		50		60		70		80	