



# TALEEM CITY INSTITUTE

Ameenpur, Faisalabad

03126987979

Name:		Roll#:		Class:	Inter Part-I
Subject:	Chemistry-11	Date:		Time:	
Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-1,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i Palladium has isotopes:  
(A)6 (B)7 (C)8 (D)9
- ii Ascorbic acid is vitamin:  
(A)A (B)B (C)C (D)D
- iii The number of moles of  $\text{CO}_2$  which contain 8.0 of oxygen:  
(A)0.25 (B)0.15 (C)0.35 (D)1.45
- iv The mass of one mole of electrons is:  
(A)1.008 mg (B)0.55 mg (C)0.184 mg (D)1.673 mg
- v 27 g of Al will react completely with how much mass of  $\text{O}_2$ , to produce  $\text{Al}_2\text{O}_3$ :  
(A)8 g of oxygen (B)16 g of oxygen (C)32 g of oxygen (D)24 g of oxygen
- vi Many elements have fractional atomic masses. This is because:  
(A)The mass of the atom is itself fractional.  
(B)Atomic masses are average masses of Isotopes.  
(C)Atomic masses are average masses of isotopes.  
(D)Atomic masses are average masses of isotopes proportional to their relative abundance.

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Define Avogadro's law and molar volume.
- ii Many chemical reactions taking place in our surrounding involve the limiting reactants. Explain with examples.
- iii How is the efficiency of a reaction expressed?
- iv What are the factors which are mostly responsible for the low yield of the products in chemical reactions?
- v Justify how Mg atom is twice heavier than that of carbon atom.
- vi Define the terms and given three examples of Percentage yield.
- vii Amount of product is controlled by limiting reactant. Why?
- viii What is the function of electric field in mass spectrometer?

## NOTE: Attempt the long question.

(4+4=8)

3(a) What is stoichiometry? Give its assumptions? Mention two important laws, which help to perform the stoichiometric calculations?

(b) Calculate the number of grams of  $\text{Al}_2\text{S}_3$  which can be prepared by the reaction of 20 g of Al and 30 g sulphur. How much the non-limiting reactant is in excess?

# MCQs Ans Key.

Q:1 (A)

Q:2 (C)

Q:3 (A)

Q:4 (B)

Q:5 (D)

Q:6 (D)



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Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-2,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i Which one is not example of a sublimate?  
(A)Ammonium chloride (B)Iodine (C)NaCl (D)Benzoic acid
- ii Compound which undergo sublimation is:  
(A)KmnO<sub>4</sub> (B)CaCO<sub>3</sub> (C)NH<sub>4</sub>Cl (D)Na<sub>2</sub>CO<sub>3</sub>
- iii Solvent extraction is an equilibrium process and is Controlled by:  
(A)Law of mass action (B)The amount of solvent used  
(C)Distribution law (D)The amount of Solute
- iv Chromatography in which the stationary phase is a solid is classified as:  
(A)Partition chromatography (B)Gas Chromatography  
(C)Adsorption Chromatography (D)Thin layer Chromatography
- v During paper chromatography, the stationary phase is:  
(A)Solid (B)Liquid (C)Gas (D)Plasma
- vi During chromatography strip should be dipped into solvent mixture to a depth of:  
(A)3-4 mm (B)4-5 mm (C)5-6 mm (D)6-7 mm

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Define Sublimation and Chromatography.
- ii Define distribution law in solvent extraction.
- iii What is solvent extraction? Give its importance.
- iv Write down two applications of chromatography.
- v Define chromatography. Give formula of distribution coefficient.
- vi What is difference between adsorption and partition chromatography?
- vii Differentiate between stationary and mobile phase used in chromatography.
- viii What is chromatography and R<sub>f</sub> value?

## NOTE: Attempt the long question.

(4+4=8)

- 3(a) A waster insoluble organic compound aspirin is prepared by the reaction of salicylic acid with a mixture of acetic acid and acetic anhydride. How will you separate the product from the reaction mixture?
- (b) You have provided with a mixture containing three inks with different colours. Write down the procedure to separate the mixture with the help of papr chromatography.

# MCQs Ans Key.

Q:1 (C)

Q:2 (C)

Q:3 (C)

Q:4 (C)

Q:5 (B)

Q:6 (C)



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Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-3,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i The unit millibar is commonly used by:  
(A) Meteorologists (B) Astronauts (C) Engineers (D) Dalton
- ii If absolute temperature of the gas is doubled and the pressure is reduced to one half the volume of the gas will:  
(A) Remains unchanged (B) Increase four times (C) Reduce to  $\frac{1}{4}$  (D) be doubled
- iii The partial pressure of oxygen in lungs is:  
(A) 760 torr (B) 320 torr (C) 159 torr (D) 116 torr
- iv Feeling uncomfortable breathing in un-pressurized cabins is due to:  
(A) High pressure of  $\text{CO}_2$  (B) Low Pressure of  $\text{O}_2$  (C) Fatigue (D) Low pressure of  $\text{CO}_2$
- v Feeling uncomfortable breathing in un-pressurized cabins is due to:  
(A) High pressure of  $\text{CO}_2$  (B) Low Pressure of  $\text{O}_2$  (C) Fatigue (D) Low pressure of  $\text{CO}_2$
- vi The temperature of natural plasma is about:  
(A) 20000 °C (B) 10000 °C (C) 5000 °C (D) 1000 °C

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Write two uses of plasma.
- ii Derive Boyle's Law from Kinetic molecular theory of gases.
- iii Define atmospheric pressure. Give its two units.
- iv Derive formula to determine density of a gas from ideal gas equation.
- v Derive Avogadro's Law from KMT of gases.
- vi Why deep sea divers take oxygen mixed with an inert gas, Like (He)?
- vii Write down two characteristics of plasma.
- viii Why water vapours do not behave ideally at 273K?

## NOTE: Attempt the long question.

(4+4=8)

3(a) Give eight postulates of KMT. (Kinetic Molecular Theory).

(b) State & explain Dalton's law of partial pressure. Drive its mathematical expression for calculating partial pressure of a gas.

# MCQs Ans Key.

Q:1 (A)

Q:2 (B)

Q:3 (D)

Q:4 (B)

Q:5 (B)

Q:6 (A)



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Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-4,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i When water freezes, its volume increases:  
(A)10% (B)9% (C)15% (D)18%
- ii London dispersion forces are the only forces present among the:  
(A)Molecules of water in liquid state (B)Atoms of helium in gaseous state at high temperature  
(C)Molecules of solid iodine (D)Molecules of hydrogen chloride gas
- iii Acetone and chloroform are soluble in each other due to:  
(A)Intermolecular hydrogen bonding (B)Dipole-dipole interaction  
(C)Instantaneous dipoles (D)All of the above
- iv Allotropy is the property of:  
(A)Compound (B)Element (C)Atom (D)Mixture
- v Transition temperature of  $\text{KNO}_3$  is:  
(A)13.2 °C (B)95.5 °C (C)128 °C (D)32.2 °C
- vi Which is Pseudo solid?  
(A) $\text{CaF}_2$  (B)Glass (C)NaCl (D) $\text{CaCl}_2$

## Q.2 Write short answers of the following questions.

(8x2=16)

- i What is the role of Hydrogen bonding in biological compounds?
- ii Lower alcohols are soluble in water but hydrocarbons are insoluble. Give reason.
- iii How the liquid crystals, help in the detection of the blockage in Veins and arteries?
- iv What are liquid Crystals? Why are they so called?
- v What is the relationship between polymorphism and allotropy?
- vi Define Polymorphisms and Anisotropy. Give one example of each.
- vii Differentiate between isomorphism and polymorphisms.
- viii Explain the term unit cell dimensions.

## NOTE: Attempt the long question.

(4+4=8)

- 3(a) What is H-bonding? Discuss H-Bonding in biological compounds.
- (b) Explain seven crystal systems with angles and edges.

# MCQs Ans Key.

Q:1 (B)

Q:2 (C)

Q:3 (A)

Q:4 (B)

Q:5 (C)

Q:6 (B)





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Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-5,				

- i Positive rays were discovered by:  
(A) J.J Thomson (B) Goldstein (C) William Crookes (D) Rutherford
- ii When atoms are subjected to strong electric field, splitting of spectral lines is called:  
(A) Zeeman effect (B) Stark effect (C) Photoelectric effect (D) Compton effect
- iii The electron in a subshell is filled according to formula:  
(A)  $2n^2$  (B)  $2(2l+1)$  (C)  $(2l+1)$  (D) none of these
- iv An orbital which is spherical and symmetrical is:  
(A) s - orbital (B) p - orbital (C) d - orbital (D) f - orbital
- v Quantum number values for 2p orbitals are:  
(A)  $n = 2, l = 1$  (B)  $n = 1, l = 2$  (C)  $n = 1, l = 0$  (D)  $n = 2, l = 0$
- vi The velocity of photon is:  
(A) Independent of its wavelength (B) Depends on its wavelength  
(C) Equal to square of its amplitude (D) Depends on its source

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Differentiate between fast neutron and slow neutron.
- ii Cathode rays are negatively charged? Explain it with diagram.
- iii Give drawbacks of Rutherford's atomic model.
- iv Prove that  $E = h\nu$ .
- v The velocity of electrons in higher orbits is less than that in the lower orbit of an atom. Give reasons.
- vi Explain atomic absorption Spectrum.
- vii What is the function of principle quantum number?
- viii Hydrogen atom and  $\text{He}^+$  are mono-electronic system, but why?

## NOTE: Attempt the long question.

(4+4=8)

- 3(a) What are quantum Numbers? Explain Azimuthal Quantum number and magnetic Quantum number.
- (b) Calculate the energy of first five orbits of hydrogen atom and determine the energy difference between them.

# MCQs Ans Key.

Q:1 (B)

Q:2 (B)

Q:3 (B)

Q:4 (A)

Q:5 (A)

Q:6 (A)



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Test Syllabus:	Unit-6,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i Which element has highest ionization potential:  
(A)Li (B)Be (C)B (D)C
- ii Which of the following has bond angle of  $120^\circ$ :  
(A)BeCl<sub>2</sub> (B)BF<sub>3</sub> (C)CH<sub>4</sub> (D)NH<sub>3</sub>
- iii The bond angle in NH<sub>3</sub> molecule is:  
(A)109.5° (B)107.5° (C)104.5° (D)108°
- iv Carbon atom in methane is hybridized:  
(A)sp<sup>3</sup> (B)sp<sup>2</sup> (C)sp (D)dsp<sup>2</sup>
- v The hybridization in ammonia molecule is:  
(A)dsp<sup>2</sup> (B)sp<sup>2</sup> (C)sp<sup>3</sup> (D)sp
- vi The number of bonds in oxygen molecules:  
(A)One  $\sigma$  and one  $\pi$  (B)One  $\sigma$  and two  $\pi$  (C)Three sigma only (D)Two  $\sigma$  and two  $\pi$

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Define ionic and covalent radii.
- ii Briefly explain the atomic and ionic radii with example.
- iii Why CO is polar and CO<sub>2</sub> is non-polar?
- iv What factors influence the electron affinity?
- v Lewis model seems to be an over simplified: Justify.
- vi What is  $\pi$ -bond? Give an example.
- vii SO<sub>3</sub> is polar or non-polar. Sketch the structures and justify your answer.
- viii The distinction between a coordinate covalent bond and a covalent bond vanishes after bond formation in NH<sub>4</sub><sup>+</sup>, H<sub>3</sub>O<sup>+</sup> and CH<sub>3</sub>NH<sub>3</sub><sup>+</sup>. Give reason.

## NOTE: Attempt the long question.

(4+4=8)

3(a) Give salient features of VSEPR Theory.

(b) Explain bonding in O<sub>2</sub> according to molecular orbital theory. Also discuss its paramagnetic property.

# MCQs Ans Key.

Q:1 (D)

Q:2 (B)

Q:3 (B)

Q:4 (A)

Q:5 (C)

Q:6 (A)



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Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-7,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i For a given process, the heat changes at constant pressure ( $q_p$ ) and at constant volume ( $q_v$ ) are related to each other as:  
(A)  $q_p = q_v$  (B)  $q_p < q_v$  (C)  $q_p > q_v$  (D)  $q_p = \frac{q_v}{2}$
- ii Calorie is equivalent to:  
(A) 0.4184 J (B) 41.84 J (C) 4.184 J (D) 418.4 J
- iii The optimum temperature for the synthesis of  $\text{NH}_3$  by Haber's process is:  
(A) 200 °C (B) 300 °C (C) 400 °C (D) 500 °C
- iv In endothermic reactions, the heat content of the:  
(A) Products is more than that of reactants (B) Reactants is more than that of products  
(C) Both a and b (D) Reactants and products are equal
- v The change in heat energy of a chemical reaction at constant temperature and pressure is called:  
(A) Enthalpy change (B) Bond energy (C) Heat of sublimation (D) internal energy change
- vi Enthalpy of neutralization of all the strong acids and strong bases has the same value because:  
(A) Neutralization leads to the formation of salt and water  
(B) Strong acids and bases are ionic substances  
(C) Acids always give rise to  $\text{H}^+$  ions and bases always furnish  $\text{OH}^-$  ions  
(D) The net chemical change involves the combination of  $\text{H}^+$  and  $\text{OH}^-$  ions to form water

## Q.2 Write short answers of the following questions.

(8x2=16)

- i What is state and state function? Explain with example.
- ii State 1<sup>st</sup> law of thermodynamics. How does it explain  $q_v = \Delta E$
- iii The enthalpy of neutralization of all the strong acids and strong bases has the same value. Justify.
- iv Define enthalpy of neutralization and enthalpy of combustion.
- v What is standard enthalpy of solution? Give one example.
- vi State Hess's law of constant Heat summation.
- vii Hess's law helps us, to calculate the heats of those reactions, which cannot be normally carried out in a laboratory. Explain it.
- viii Is it true that a non-spontaneous process never happens in the universe?

## NOTE: Attempt the long question.

(4+4=8)

3(a) Explain glass calorimetric method for the measurement of Enthalpy of a reaction.

(b) What is first law of thermodynamics? Prove that  $\Delta E = q_v$ .

# MCQs Ans Key.

Q:1 (C)

Q:2 (C)

Q:3 (C)

Q:4 (A)

Q:5 (A)

Q:6 (D)



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Test Syllabus:	Unit-8,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i \_\_\_\_\_ was derived by C.M. guldberg and P. Waage in 1864:  
(A) Law of Conservation of Mass (B) Law of Mass Action  
(C) Distribution Law (D) Law of Conservation of Energy
- ii The unit of  $K_c$  for reaction  $N_2 + O_2 \rightleftharpoons 2NO$  will be:  
(A) moles / dm<sup>3</sup> (B) mole<sup>-1</sup> / dm<sup>3</sup> (C) mole<sup>-2</sup>dm<sup>+6</sup> (D) No unit
- iii The PH of human blood is maintained at PH:  
(A) 7.4 (B) 7.3 (C) 7.00 (D) 8.00
- iv pH of soft drinks at 25 °C is about:  
(A) 3.0 (B) 11.0 (C) 1.0 (D) 7.0
- v Sum of  $pK_a$  and  $pK_b$  is equal to:  
(A) 7 (B) 1 (C) 14 (D) 0
- vi The nature of milk is:  
(A) Acidic (B) Basic (C) Neutral (D) Normal

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Define reversible reaction with an example.
- ii How ammonia is synthesized by Haber's Process? Also give the optimum condition of reactions.
- iii Calculate the pH of 1.0 mole dm<sup>-3</sup> of  $NH_4OH$  which is 1 % dissociated.
- iv What is ionic product of water?
- v Calculate PH of 10<sup>-4</sup> mol dm<sup>-3</sup> of  $Ba(OH)_2$ .
- vi How a basic buffer can be prepared ?
- vii Why do we need buffer solution?
- viii Explain with reasons. The change of volume disturbs the equilibrium position for some of the gaseous phases reactions but not the equilibrium constant.

## NOTE: Attempt the long question.

(4+4=8)

- 3(a) A buffer solution has been prepared by mixing 0.2 M  $CH_3COONa$  and 0.5 M  $CH_3COOH$  in 1 dm<sup>3</sup> of solution. Calculate the pH of solution.  $pK_a$  of acid = 4.74 at 25°C. How the values of pH will change by adding 0.1 mole of NaOH and 0.1 mole of HCl separately.
- (b) Calculate the percentage ionization of acetic acid in a solution in which 0.1 moles of it has been dissolved per dm<sup>3</sup> of the solution.  $K_a = 1.85 \times 10^{-5}$ .

# MCQs Ans Key.

Q:1 (B)

Q:2 (D)

Q:3 (A)

Q:4 (A)

Q:5 (C)

Q:6 (B)





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Test Type #	Type 8 - Short Test (No Choice) - Marks=30				
Test Syllabus:	Unit-9,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- Melting of ice can be lowered by the use of:  
(A) LiCl (B) BeCl<sub>2</sub> (C) NaCl (D) AgCl
- Relative lowering of vapour pressure is equal to:  
(A) Mole fraction of solute (B) Mole fraction of solvent  
(C) Molarity (D) Molality
- The molal boiling point constant is the ratio of the elevation in boiling point to:  
(A) Molarity (B) Molality  
(C) Mole fraction of solvent (D) Mole fraction of solute
- Azeotropic mixture of two liquids boils at a lower temperature than either of them, when:  
(A) It is saturated (B) It shows positive deviation from Raoult's law  
(C) It shows negative deviation from Raoult's law (D) It is metastable
- In Azeotropic mixture showing positive deviation from Raoult's law, the volume of the mixture is:  
(A) Slightly more than the total volume of the components (B) Equal to the total volume of the components  
(C) Equal to the total volume of the components (D) None of these
- Colligative properties are the properties of:  
(A) Dilute solutions which behave as nearly ideal solutions  
(B) Concentrated solutions which behave as nearly non-ideal solutions  
(C) Both (a) and (b)  
(D) Neither (a) nor (b)

## Q.2 Write short answers of the following questions.

(8x2=16)

- Define Raoult's Law. Give one of its mathematical forms.
- Define and explain a non-ideal solution with one example.
- Write the names of Colligative properties of dilute solutions.
- Why some of the properties are called Colligative?
- What are the name of major parts of apparatus used in Landsberger's method for elevation of Boiling Point?
- Boiling points of liquids are increased when a solute is added to them. Justify it
- Explain with reason that relative lowering of vapour pressure is independent of the temperature.
- Explain with reason that the total volume of the solution by mixing 100 cm<sup>3</sup> of alcohol may not be equal to 200 cm<sup>3</sup>. Justify it.

## NOTE: Attempt the long question.

(4+4=8)

- 3(a) Explain Lowering of Vapour Pressure by adding a Non-volatile, Non electrolyte solute in a solvent.  
(b) Define solubility and differentiate between continuous solubility and discontinuous solubility curves.

# MCQs Ans Key.

Q:1 (C)

Q:2 (A)

Q:3 (B)

Q:4 (B)

Q:5 (A)

Q:6 (A)



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Test Syllabus:	Unit-10,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i In silver oxide battery, the cathode is made up of:  
(A)AgO (B)Ag<sub>2</sub>O (C)Ag<sub>2</sub>O<sub>3</sub> (D)Ag
- ii Oxidation number of phosphorus in the compound (HPO<sub>3</sub>) is:  
(A)+3 (B)+4 (C)+5 (D)+6
- iii Oxidation number of Cr in a K<sub>2</sub>CrO<sub>4</sub> is:  
(A)+2 (B)+4 (C)+6 (D)+8
- iv The cathodic reaction in the electrolysis of dil. H<sub>2</sub>SO<sub>4</sub> with Pt electrodes is:  
(A)reduction (B)oxidation  
(C)both oxidation and reduction (D)neither oxidation nor reduction
- v The reduction potential of Zn is:  
(A)+0.76 V (B)-0.34 V (C)+0.34 V (D)-0.76
- vi Which of the following statements is correct about Galvanic cell?  
(A)anode is negatively charged (B)reduction occurs at anode  
(C)cathode is positively charged (D)reduction occurs at cathode

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Write two rules for assigning oxidation number.
- ii Balance the ionic equations by ion-electron method.  $IO_3^{1-} + AsO_3^{3-} \rightarrow I^- + AsO_4^{3-}$ .
- iii Balance the ionic equations by ion-electron method.  $CN^- + MnO_4^{1-} \rightarrow CNO^- + MnO_2(s)$ .
- iv Differentiate between primary and secondary cell giving one example each.
- v Write down the equations for electrode processes in the electrolysis of fused PbCl<sub>2</sub>.
- vi What is salt bridge? How it maintains electrical neutrality in the half cell solution.
- vii What is electrochemical series? Give its four application.
- viii Give any two applications of electrochemical series.

## NOTE: Attempt the long question.

(4+4=8)

3(a) Describe a galvanic cell, explaining the functions of electrodes and the salt bridge.

(b) Write a note on Spontaneity of oxidation reduction reactions.

# MCQs Ans Key.

Q:1 (B)

Q:2 (C)

Q:3 (C)

Q:4 (A)

Q:5 (A)

Q:6 (D)



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Test Syllabus:	Unit-11,				

## Q.1 Circle the Correct Answers.

(6x1=6)

- i The rate of reaction determined at any given time is called:  
(A)Average rate (B)Instantaneous rate (C)Spontaneous rate (D)Overall rate
- ii The rate of reaction \_\_\_ as the reaction proceeds.  
(A)Increases (B)Decreases  
(C)Remains the same (D)May decrease or Increase
- iii Unit of Rate Constant is the same as that of the rate of reaction in:  
(A)Zero Order Reaction (B)1st Order Reaction (C)2nd Order Reaction (D)3rd Order Reaction
- iv The order of decomposition of Nitrogen Pent oxide  $2\text{N}_2\text{O}_5 \rightarrow 2\text{N}_2\text{O}_4 + \text{O}_2$  is:  
(A)First-order (B)Second-order (C)Third-order (D)Zero order
- v If the rate equation of a reaction  $2\text{A} + \text{B} \rightarrow$  products is, rate  $=k[\text{A}]^2[\text{B}]$ , and A is present in large excess, then order of reaction is:  
(A)1 (B)2 (C)3 (D)none of these
- vi With increase in  $10^\circ\text{C}$  temperature, the rate of reaction doubles. This increase in rate of reaction is due to:  
(A)Decrease in activation energy of reaction  
(B)Decrease in the number of collisions between reactant molecules  
(C)Increase in activation energy of reactants  
(D)Increase in number of effective collisions

## Q.2 Write short answers of the following questions.

(8x2=16)

- i Rate of reaction decreases with the passage of time explains.
- ii Define instantaneous and Average rate of reaction.
- iii What is meant by order of reaction? Give an example.
- iv What is Zero-order reaction? Give one example.
- v What is pseudo first order reaction? Give one example.
- vi Under what conditions activated complex is formed?
- vii What is the effect of temperature on energy of activation of a reaction?
- viii What is chemical kinetics? How do you compare chemical kinetics with chemical equilibrium and thermodynamics?

## NOTE: Attempt the long question.

(4+4=8)

- 3(a) Define half-life period. Give one example. How half life method is used to find the order of reaction.
- (b) Discuss the factors which influence the rate of chemical reactions.

# MCQs Ans Key.

Q:1 (B)

Q:2 (B)

Q:3 (A)

Q:4 (A)

Q:5 (A)

Q:6 (D)