Chemistry (PART-I)

Time: 20 MM. (Section-A) Marks: 18

Note: You have four choice for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question.

Q.No.1

i. SI unit of coefficient of viscosity is.

A. Kg m-1

B. Kgs-1

C. Kg m -1 S-1

D. Kg ms-2

ii. Fog is the example of----------.

A. Suspension

B. Colloid

C. Solution

D. None

iii. Oxidation number of those elements which have High Electro negativities is---.
A. Negative

B. Positive

C. Zero

D. All of these

iv. K (rate constant) is dependent on

A. Temperature

 B. Concentration

C. Volume

D. None of these

v. Which one of the given has greatest intermolecular force?

A. Glycerin

B. Water

C. Ethanol

D. Ether

vi. With the increase in temperature the rate of reaction increases due to---------.

A. More number of molecules attains activation energy

B. Increase in K.E of the molecules

C. Decrease in activation energy

D. Increase in collisions

vii. The oxidation number of CI in HCIO3 is------------.

A. +5

B. +3

C. +1

D. -1

viii. Electrolysis is process in which the cations and anions liberated from the electrolyte are---------.

A. Discharged

B. Charged

C. Hydrolyzed

D. Hydrated

ix. The percentage of Ca in CaCO3 is----------.

A. 40

B. 48

C. 100

D. 12

x. Le chateliers principle applies to a-------------- system.

A. Chemical

B. Physical

C. Mechanical

D. Both A and B

xi. An orbital can have the maximum number of two electrons but with opposite spin, it is called-----------.

A. Paulis Exclusion principle

B. Hunds Rule

C. Auf bau principle

D. Le. Chatelier principle

xii. Most penetrating radiation of radioactive element is------------.

A. a-rays

B. B-rays

C. r-rays

D.X-rays

xiii. If ionic product is greater than solubility product, the solution is---------.

A. Saturated

B. Un-saturated

C. Super saturated

D. None of these

xiv. A very large value of Kc indicates that reactants are----------.

A. Very stable

B. Very unstable

C. Moderately stable

D. None of these

xv. The frequency of green light is 6X 1014 Hz.Its wavelength is---------.

A. 100 nm

B. 5000 nm

C. 5 nm

D. 500 nm

xvi. Freezing point of solution as compared to the solvent is---------.

A. Variable

B. Lower

C. Higher

D. Same

xvii. All of the given substances are crystalline except------------.

A. Ice

B. Diamond

C. Sucrose

D. Glass

xviii. Which one of the given reaction is spontaneous?

A. Endothermic

B. Exothermic

C. Reversible

D. Irreversible

Peshawar Board 2016

Chemistry (PART-I)

Time: 2.40 Hours.   (Section-B)   Marks: 40

2. Answer any TEN parts. Each part carries FOUR marks.

1. Discuss the effect of change in temperature on chemical equilibrium.

2. What are liquid? Give their uses in daily life.

3. Write a note on charge to mass ratio of cathode rays.

4. Differentiate Solution, Suspension and Colloids.

5. Discuss the relation between Kp and Kx.

6. Explain the factors affecting London dispersion forces.

7. State and explain law of mass action

8. Write a note on standard hydrogen electrode

9. Calculate the density of CH4 at Oo C and 1 atmosphere.

10. Why actual yield of reaction is less than theoretical yield. Give reasons.

11. Write down the properties of X-rays.

12. Calculate the value of R at STP.

13. Write note on

(i) Polymorphism

(ii)Crystal lattice.

Section -C

Note: Attempt any THREE questions. All questions carry equal marks.

3. (A) What are buffer Solutions? Explain their action.

(B) Discuss the azimuthal quantum numbers.

4. (A) Derive non-ideal gas expression. (The van der wals equation)

(B) State and explain Hess,s Law.

5. (A) Write a detail note on surface tension.

(B) Explain bonding in oxygen molecule with the help of MOT.

6. Write short note on the following.

Solubility Product

Raoults Law