TELANGANA UNIVERSITY
S.S.R. DEGREE COLLEGE, NIZAMABAD (C.C:5029)
II SEMESTER INTERNAL ASSESSMENT II EXAMINATIONS
CHEMISTRY QUESTION BANK

I. Choose the correct Answers.

1.Units for Molarity [a]

a) Moles/lit b) molar c) Molex ×lit d) a & b

2. At which temperature water + Trietly\ amine mixes to form completcly miscible liquids [a]

a) 19.5℃ b) 18.5℃ c) 17.5℃ d) 16.5℃

3. No. of Rectangular planes are [a]

a) 6 b) 4 c) 3 d) 2

4. How many hody centers our present in a cubic crystal [d]

a) 4 b) 3 c) 2 d) 1

5. Relaton between α, β, γ in monoclinic system [b]

a)$\alpha \neq \beta \neq \gamma = 90°$ b) $\alpha = \gamma = 90°, \beta \neq 90°$ c) $\alpha = \beta = \gamma = 90°$ d) None

6. No.of moles of solvent ($\cap A$) [c]

a) $\frac{weightofsolute}{molculacweightofsolute}$ b) $\frac{molcularweightofsolute}{weightofsolvte}$

c) $\frac{weightofsolvent}{molcularweightofsolvent}$ d) $\frac{molcularweightofsolute}{weightofsolvte}$

7. Lowering vapour procures (Δ_p) = [a]

a) $p_o - p_s$ b) $p_s - p_o$ c) $p_o + p_s$ d) $p_s + p_o$

8. Identify Raoults law [c]

a) $\frac{P_0 - P_s}{P_0} = n_A$ b) $\frac{P_0 - P_s}{P_0} = X\beta$ c) $\frac{P_0 - P_s}{P_0} = X_P$ d) $\frac{P_0 - P_s}{P_0} = n_A$

9 . Identify Vant Hoff Gelusac law [c]

a) $\pi \propto T$ b) $\pi \propto P$ c) $\pi \propto \frac{1}{v}$ d) $\pi \propto n_B$

10. Range of phenaptnalene indicator is [c]

a) 3.1 to 4.4 b) 4.2-6.3 c) 8.3-10.0 d) 5-8

II. Fill in the blanks

1. Mole fraction of solvent $X_1 = \frac{n_1}{n_1 + n_2}$

2. According to Raoults & ΔH value for solutions having positive deviation ΔH = 0

3. Brags' & equations $n\lambda = 2d\sin\theta$

4. To explain symmetry of lattice 3 symmetry elements & are used.

5. Egg layer is used as semipermiable memprane.

6. Degree of Association (α) = _____

7. EDTA means Ethylene diamine tetramethyl acetate

8. The no. of Bravals lattices in triclinic 14

9. In acidic medium methyl/orage exhibit _____ structure.

10. What is EBT Erichrome black-T

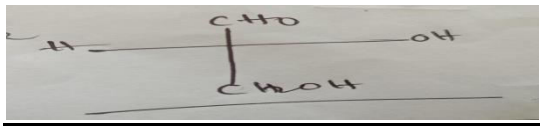
11. S = 0.821 lit-atm/mole/dy

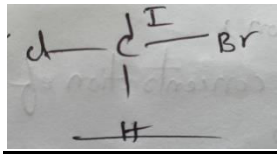
12. Molefraction of solute $X_2 = \frac{n_2}{n_1 + n_2}$

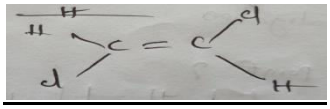
13. No. of chiral center's in tartaric acid 2

14. When the molecule is unsymmetrical no. of d & l isomers = 2^n

15. When the molecule is symmetrical No. of d & l isomers = 2^{n-1}

16. Formula of Glyceraldehyde 

17. Example tetra-4 symetric molecule 

18. Example for disymetic molecule 

19. For dissymmetric molecule n > 1

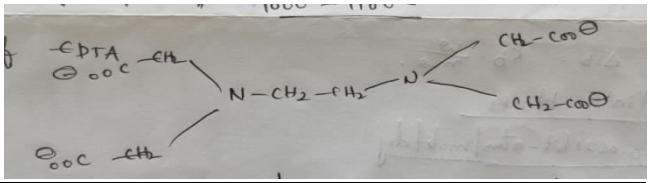
20. Cn = $360^0/n$

21. 1 ml 0.1 m EDTA = 5.871 gmNi

22. AgCl ppt is dried at = 130^0 C – 150^0 C

23. $BaSO_4$ ppt is dried at = 800^0C – 900^0C

24. Mg ppt is dried at = 1000^0C – 1100^0C

25. Structure of EDTA 

26. Example for weak acid & weak base $\underline{CH_3COOH \ \& \ NH_4OH}$

27. Methyl orange range is 3.1 – 4.4

28. Methyl red range is 4.2 – 6.3

29. $AgNO_3 + KCl \longrightarrow AgCl + KNO_3$

30. $\Delta G = \underline{-nFt}$

III. Short Answers.

1. What is Raoult's Law ?

A: $\frac{P^0 - P}{P^0} = X_2$

2. Define normality?

A: $N = \frac{\omega}{g \in \omega} \times \frac{1}{v(l,t)}$

3. Write the sturecture of kcl lattice?

A:

4. What is Indicator?

A: The substance which is used to determine end point in the titration without any error.

5. What is post precipitation?

A: Surface of the first precipitate after its formation.

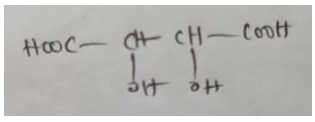
6. What is neutralization?

A: Determination of concentration of an acid with base is called neutralization.

7. What is end point?

A: The print at which the titration process is completed is called end point.

8. Write the structure of tartaric acid?

A: 

9. Write osmotic pressure equation?

A: $\pi v = nsT$

10. Write equation for elevation in boiling point?

A: $\Delta Tb = Kb.\frac{\omega}{m\omega}$