REVISION TEST-III

CLASS : XII **MARKS** : 70 **SUBJECT: CHEMISTRY TIME: 3.00 HRS** (FULL PORTION) **PART-I** CHOOSE THE BEST ANSWER $15 \times 1 = 15$ 1. Wolframite ore is separated from tinstone by the process of b) Calcination c) Roasting d) Electromagnetic separation a) Smelting 2. The stability of +1 oxidation state increases in the sequence b) Tl < In < Ga < Ala) Al < Ga < In < Tlc) In < Tl < Ga < Ald) Ga < In < Al < Tl3. The actinoid elements which show the highest oxidation state of +7 are b) U, Fm, Th c) U, Th, Md d) Es, No, Lr a) Np, Pu ,Am 4. Which type of geomentry for a complex $[Co(NH_3)_6]^{3+}$ a) trigonal bipyramidal b) octahedral c) tetrahedral d) square planar 5. If 75% of a first order reaction was completed in 60 minutes, 50% of the same reaction under the same conditions would be completed in a) 20 minutes b) 30 minutes c) 35 minutes d) 75 minutes 6. Which of these is not likely to act as lewis base? b) PF₃ C) CO d) F 7. On which of the following properties does the coagulating power of an ion depend? a) Both magnitude and sign of the charge on the ion. b) Size of the ion alone c) the magnitude of the charge on the ion alone d) the sign of charge on the ion alone. 8. Which of the following compounds on reaction with methyl magnesium bromide will give tertiary alcohol. a) benzaldehyde b) propanoic acid c) methyl propanoate d) acetaldehyde 9. The product formed by the reaction an aldehyde with a prmary amine a) carboxylic acid b) aromatic acid c) schiff 's base d) ketone 10. Among the following the achiral amino acid is a) 2-ethylalanine b) 2-methylglycine c) 2-hydroxymethylserine d) Tryptophan 11. Hybridisation of XeOF₂ is _ b) SP³d c) sp^3d^2 d) sp^3 a) SP³ 12. Packing efficiency of face centred cubic (FCC) (a) 52.31% (b) 68% (c) 74%(d) 52.13% 13. Laptops have_ (a) Lead storage battery (b) Fuel cell (c) Mercury button cell (d) Lithium-ion battery

14. _____ is used in the manufacture of thermosoftening plastic perspex (a) Benzaldehyde (b) Acetone (c) Acetaldehyde (d) Benzophenone 15. Match the following (1) Major tranquilizers (i) Non steroidal anti-inflammatory drug (2) Analgesics (ii) propofol (3) NSAIDs (iii) clozapine (4)Intravenous general anaesthetics (iv) Aspirin (a) (1) –(iii) (2)-(iv) (3)-(i) (4)-(ii) (b) (1)-(i) (2)-(ii) (3)-(iii) (4)-(iv) (d) (1)-(iv) (2)-(iii) (3)-(ii) (4)-(i) (c) (1)-(ii) (2)-(i) (3)-(iv) (4)-(iii) **PART-II** Answer the following any six questions $6 \times 2 = 12$ **Note: Question no: 24 is compulsory** 16. Write a note on gravity separation method? 17. Out of Lu(OH)₃ and La(OH)₃ which is more basic and why? 18. Explain the structure of amine 19. What is packing efficiency? 20. Define ionic product of water .Give its value at room temperature 21. Write a note on Electrophoresis? 22. give the uses of diethyl ether 23. Write note on benzoin condensation? 24. Write the IUPAC names for the following compounds i) $[Co(ONO)(NH_3)_5]^{2+}$ ii) $[Co(en)_3]SO_4$ **PART-III** $6 \times 3 = 18$ Answer the following any six questions

Note: Question no: 33 is compulsory

- 25. What is lanthanide or lanthanoide contraction explain its consequences \
- 26. .[Fe(CN)₆]³⁻ paramagnetic, explain using VBtheory
- 27. Derive an expression for Nernst equation
- 28. Define molar conductance and specific conductance
- 29. give any three difference between chemisorption and physisorption
- 30. formic acid reduces tollen's reagent whereas acetic acid does not reduce give reason
- 31. Describe the structure of diborane
- 32. what are narcotic and non-narcotic drugs. give examples
- 33. Mention the biological importance of lipids

PART-IV

ANSWER ALL THE QUESTIONS

5 X 5 = 25

- 34. a) i) Explain concentration by magnetic separation with diagram
 - ii) What is inert pair effect?

(OR)

- b) i) .which type of ores can be concentrated by froth flotation method give two example
 - ii) Give the uses of argon
- 35. a) i) Complete the following reaction?
 - i) $NH_3(excess) + Cl_2 \rightarrow ?$
- ii) i) NH₃ + Cl₂(excess) \rightarrow
- ii) Calculate the magnetic moment and magnetic property of $[CoF_6]^{3-}$

(OR)

- b) i) what are the limitation of VB theory?
 - ii) Write any three difference between tetrahedral and Octahedral voids
- 36. a) i) write two difference between rate and rate constant of a reaction
 - ii) Give examples for the first order reactions

(OR)

- b) i) What are the limitations of Arrhenius concept?
 - ii) Define equivalent conductance
- 37. a) i) Explain intermediate compound formation theory of catalysis with an example
 - ii) How is neoprene prepared?

(OR)

- b) i) How will you prepare picric acid from phenol?
 - ii) what is metamerism and give one example?
- 38. a) Explain the structure of fructose

(OR)

- b)i) Write the reaction of electrolytic reduction of nitro benzene?
 - ii)Identify compounds A,B and C for the following


