

REVISION TEST -I**CLASS : XII****MARKS : 70****SUBJECT : CHEMISTRY****(FULL PORTION)****TIME : 3.00 HRS****PART-I****CHOOSE THE BEST ANSWER****15 X 1 = 15**

- Boric acid is an acid because its molecule
 - contains replaceable H⁺ ion
 - gives up a proton
 - combines with proton to form water molecule
 - accepts OH⁻ from water, releasing proton
- In the brown ring test, brown colour of the ring is due to
 - a mixture of NO and NO₂
 - Nitroso ferrous sulphate
 - Ferrous nitrate
 - Ferric nitrate
- A complex in which the oxidation number of the metal is zero is
 - K₄[Fe(CN)₆]
 - [Fe(CN)₃(NH₃)₃]
 - [Fe(CO)₅]
 - both b and c
- Graphite and diamond are
 - Covalent and molecular crystals
 - ionic and covalent crystals
 - both covalent crystals
 - both molecular crystals
- The pH of an aqueous solution is Zero. The solution is
 - slightly acidic
 - strongly acidic
 - neutral
 - basic
- Zinc can be coated on iron to produce galvanized iron but the reverse is not possible. It is because
 - Zinc is lighter than iron
 - Zinc has lower melting point than iron
 - Zinc has lower negative electrode potential than iron
 - Zinc has higher negative electrode potential than iron
- Carbolic acid is
 - Phenol
 - Picric acid
 - benzoic acid
 - phenylacetic acid
- The formation of cyanohydrin from acetone is an example of
 - nucleophilic substitution
 - electrophilic substitution
 - electrophilic addition
 - Nucleophilic addition
- Which one given below is a non-reducing sugar?
 - Glucose
 - Sucrose
 - maltose
 - Lactose
- The drug used to induce sleep is
 - paracetamol
 - bithional
 - chloroquine
 - equanil
- _____ method is separate for low boiling volatile metals
 - Liquation
 - Distillation
 - Vaour phase method
 - zone refining
- The actual position of actinoids in the periodic table is at
 - group number 3 period number 4
 - group number 6 period number 3
 - group number 4 period number 4
 - group number 3 period number 7

13. Decomposition of thionyl chloride _____ order reaction
 a) zero b) first c) second d) third
14. W_3O_5 sol is _____ shape
 a) spherical b) Disc c) Rod d) none of these
15. $CH_2=CH-CH_2-NH_2$ This compound iupac name is _____
 a) Prop-2-en-1-amine b) Prop-1-en-3-amine
 c) ethaen-2-1-amine d) but-2-en-1-amine

PART-II

Answer the following any six questions

6 X 2 = 12

Note : Question no : 24 is compulsory

16. What is royal water ? or Aquaregia what is its use ?
17. Transition metals show high melting points why?
18. Give the difference between double salt and coordination compound
19. What are primitive and non primitive unit cell?
20. Define solubility product
21. What is heterogeneous catalysis ? give example
22. Write the test for esterification reaction?
23. Identify A and B
- | | | |
|----|--------------------------------------|------------------|
| A. | $\xrightarrow{Na(Hg)/C_2H_5OH/4[H]}$ | $CH_3-CH_2-NH_2$ |
| B | $\xrightarrow{Na(Hg)/C_2H_5OH/4[H]}$ | $CH_3-NH-CH_3$ |

24. How does HI react with following compounds

- i) $C_2H_5-O-CH_3$ ii) $C_6H_5-O-CH_3$

PART-III

Answer the following any six questions

6 X 3 = 18

Note : Question no : 33 is compulsory

25. Compare the properties of lanthanides and actinides.
26. what are the limitation of VB theory ?
27. What are the conversion used Galvanic cell notation ?
28. State kohlrausch law and explain any one of the application
29. Explain intermediate compound formation theory of catalysis with an example
30. Write the test for carboxylic acid group
31. Write a short note on peptide bond
32. What is antiseptic agent give an example?
33. what are the factors responsible for the anomalous behaviour of first element of the p-block ?

PART-IV**ANSWER ALL THE QUESTIONS****5 X 5 = 25**

34. a) i) What are the difference between minerals and ores?

ii) Describe mond process for refining nickel.

(OR)

b) i) How is potash alum prepared?

ii) What are interhalogen compounds ? give two examples

35. a) i) What are the hybridisation of IF_7 ? Give its structure

ii) What is crystal field stabilization energy ?

(OR)

b) i) $[Ni(CO)_4]$ diamagnetic , explain using VB theory

ii) Define unit cell

36. a) derive integrated rate law for a zero order reaction $A \rightarrow$ product.

(OR)

b) i) Derive an expression for ostwald dilution law

ii) what is electrochemical equivalent?

37. a) i) Write any three characters of catalysts ?

ii) What are bio degradable polymers? Give examples

(OR)

b) i) differentiate primary secondary and tertiary alcohols using Lucas test

ii) How is ethylene glycol converted into 1,4 dioxane ?

38. a) i) Write the mechanism of aldol condensation reaction

ii) Draw the structure of lactose and Sucrose

(OR)

b) i) write short note on Gabriel phthalimide synthesis

ii) What is carbylamine rreaction
