NEET Sample Paper 1 PDF for Droppers (Chemistry)

- 1. On treating a mixture of two alkyl halides with sodium metal in dry ether, 2-Methylpropane was obtained. The alkyl halides are;
- (1) 2-Chloropropane & Chloromethane
- (2) 2-Chloropropane & Chloroethane
- (3) Chloromethane & Chloroethane
- (4) Chloromethane & 1-Chloropropane
- 2. Solution of 0.1 M NH4OH and 0.1 M NH4Cl has pH 9.25, The pKb of NH4OH is;
- (1) 9.25 (2) 4.75
- (3) 3.75 (4) 8.25
- 3. The reducing character of hydrides of group 14 elements is:
- (1) Maximum for CH4 and minimum for PbH4
- (2) Maximum for CH4 and minimum for SnH4
- (3) Maximum for PbH4 and minimum for SiH4
- (4) Maximum for PbH4 and minimum for CH4
- 4. Assertion (R): Scandium and zinc are two members of first transition series which do not form coloured compounds.
- Reason (R): Scandium compounds have 3d0 configuration in + 3 state while zinc compounds have 3d10 configuration in + 2 state due to which there is no d-d transition.
- (1) If both assertion and reason are true and reason is the correct explanation of assertion.
- (2) If both assertion and reason are true but reason is not the correct explanation of assertion.
- (3) If assertion is true but reason is false.
- (4) If both assertion and reason are false.

- 5. Which of the following major product will be obtained when neopentyl alcohol is treated with conc. HCl in presence of ZnCl2?
- (1) t-Butyl chloride
- (2) Isobutylene
- (3) t-Pentyl chloride
- (4) Neopentyl chloride
- 6. The shape of CIO3- is;
- (1) Pyramidal
- (2) Tetrahedral
- (3) Triangular planar
- (4) Triangular bipyramidal
- 7. Denaturation of protein;
- (1) is always irreversible
- (2) disrupts the secondary and tertiary structures only
- (3) will not affect the original biological activity
- (4) none of these ver Prepare Achieve
- 8. The incorrect statement regarding an octahedral complex is;
- (1) central metal cation with d6 configuration is diamagnetic in strong ligand field.
- (2) central metal cation with d5 configuration has one unpaired electron in both weak and strong ligand field.
- (3) central metal cation with d8 configuration has two unpaired electrons in weak, strong and also in mixed ligand field.

- (4) central metal cation with d4
- , d5
- , d6

and d7

configuration have different number of unpaired electrons in weak and strong ligand field.

- 9. The colour of light absorbed by an aqueous solution of CuSO4 is;
- (1) Orange-Red (2) Blue-Green
- (3) Yellow (4) Violet
- 10. The number of spectral lines that are possible when electrons in 7th shell in different hydrogen atoms return to the 2nd shell is;
- (1) 12 (2) 15
- (3) 14 (4) 10
- 11. Which of the following statements is in accordance with the Arrhenius equation?
- (1) Rate of a reaction has no effect with increase in temperature.
- (2) Rate of a reaction increases with decrease in activation energy.
- (3) Rate constant decreases exponentially with increase in temperature.
- (4) Rate of reaction decreases with decrease in activation.
- 12. Statement-1: The reciprocal of time in which 66% of the reactant is converted to product is equal to the rate constant of first order reaction.

Statement-2: The rate constant for first order reaction depends on initial concentration of reactants.

(1) Statement I and statement II both are correct.

- (2) Statement I and statement II both are incorrect.
- (3) Statement I is true but statement II is false.
- (4) Statement I is false but statement II is true.
- 13. Statement-1: Carbonyl compounds take part in nucleophilic addition reactions.

Statement-2: These reactions are initiated by nucleophilic attack at the electron deficient carbon atom.

- (1) Statement I and statement II both are correct.
- (2) Statement I and statement II both are incorrect.
- (3) Statement I is true but statement II is false.
- (4) Statement I is false but statement II is true.
- 14. Statement-1: Fluorine molecule has bond order one. Statement-2: The number of electrons in antibonding molecular orbitals is two less than in bonding molecular orbitals.
- (1) Statement I and statement II both are correct.
- (2) Statement I and statement II both are incorrect.
- (3) Statement I is true but statement II is false.
- (4) Statement I is false but statement II is true.
- 15. The synthesis of alkyl fluorides is best accomplished by:

Achieve

- (1) Swarts reaction
- (2) Free radical fluorination
- (3) Finkelstein reaction
- (4) Sandmeyer reaction
- 16. Non-reducing sugar out of the given molecules is/are:
- (1) Maltose (2) Lactose
- (3) Sucrose (4) Both (1) and (3)
- 17. The oxidation state of chromium in the final product formed by the reaction between KI and acidified K2Cr2O7 solution is:

- (1) + 4(2) + 6
- (3) + 2(4) + 3
- 18. Tollens' reagent is:
- (1) Alkaline mercuric chloride
- (2) Alkaline potassium permanganate
- (3) Ammoniacal silver nitrate
- (4) Ammonium citrate
- 19. A mixture showing negative deviation from Raoult's law is:
- (1) Hexane + Heptane
- (2) Benzene + Toluene
- (3) Water + Ethanol
- (4) Nitric acid + Water

20.

