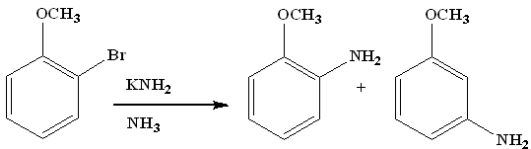


**University of Mumbai**  
**SYBSc/Semester-III/Chemistry**  
**Subject: - Chemistry-I**  
**Sample Questions**

**Date:-17/11/2020**

*Multiple Choice Questions*

- 1 Kohlrausch's law is not applicable for determination of...  
a) Degree of dissociation      b) EMF      c) Solubility Product      d) Ionization product of water
- 2 For spontaneity of reaction  $\Delta G$  must be....  
a) Positive      b) Negative      c) Neutral      d) Zero
- 3  $S\text{m}^{-1}$  is unit of \_\_\_\_\_.  
a) Conductance      b) Specific Conductance      c) Equivalent Conductance      d) Molar Conductance
- 4 The variation of equilibrium constant with temperature is given by\_\_\_\_ equation.  
a) Gibbs-Helmholtz      b) Vant's Hoff isotherm      c) Vant's Hoff isochore      d) Gibbs free energy
- 5 If z -axis is molecular axis then hybridization for carbon atom in ethyne molecule is  
a)  $sp (s + px)$       b)  $sp (s + py)$       c)  $sp (s + pz)$       d)  $sp (s + pd)$
- 6 Energy released when gaseous ions are brought from infinity to form a mole of solid substance at  $0^\circ\text{K}$  is known as \_\_\_\_\_.  
a) Ionization energy      b) Lattice energy      c) Dissociation energy      d) Enthalpy
- 7 Limiting radius ratio 0.225-0.414 value indicates\_\_\_\_ geometry.  
a) Linear      b) Trigonal      c) Tetrahedral      d) Octahedral
- 8 Given reaction shows \_\_\_\_\_mechanism.  
  
a)  $S_N^1$  mechanism      b)  $S_N^2$  mechanism      c)  $S_N^i$  mechanism      d) Benzyne Mechanism
- 9 Epoxide react with HCN in presence of CaO it gives\_\_\_\_\_.  
a) 2-Amino ethanol      b) 2-Cyano ethanol      c) Halohydrin      d) Epoxide
- 10 Among following molecule which is having more acidic character?  
a) o-methylphenol      b) p-methylphenol      c) Phenol      d) m-Nitrophenol

