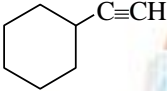
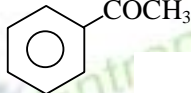
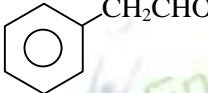
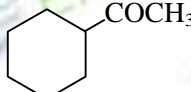
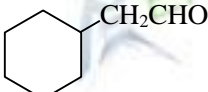


114. Hydration of  in presence of $\text{H}_2\text{SO}_4/\text{HgSO}_4$ gives
- (a)  (b) 
- (c)  (d) 
115. The standard heat of formation values of $\text{SF}_6(\text{g})$, $\text{S}(\text{g})$ and $\text{F}(\text{g})$ are: -1100 , 275 and 80 kJ mol^{-1} respectively. Then the average S – F bond energy in SF_6 would be
- (a) 301 kJ mol^{-1} (b) 320 kJ mol^{-1} (c) 309 kJ mol^{-1} (d) 280 kJ mol^{-1}
116. The oxidation of oxalic acid by acidified KMnO_4 becomes fast as the reaction progresses due to:
- (a) auto catalysis by Mn^{+2} (b) presence of SO_4^{-2}
- (c) presence of K^+ (d) presence of MnO_2
117. Which of the following is/are diamagnetic?
- (i) $\text{Ni}(\text{CO})_4$ (ii) $[\text{NiCl}_4]^{2-}$
- (iii) $[\text{Ni}(\text{CN})_4]^{2-}$ (iv) $[\text{Fe}(\text{H}_2\text{O})_6]^{2+}$
- (a) (i) only (b) (ii) only
- (c) (i) and (iii) only (d) (iv) only
118. During the electrolysis of aqueous nitric acid solution using Pt electrodes
- (a) O_2 is liberated at the cathode. (b) N_2 is liberated at the anode.
- (c) O_2 is liberated at the anode. (d) H_2 is liberated at the anode.
119. Colloidal solution is
- (a) true solution. (b) suspension.
- (c) heterogeneous sol. (d) homogenous sol.
120. To make E_{cell} of the following concentration cell positive, what should be the relative concentration of Cl^- ions in the two half cells?
- $\text{Pt} | \text{Cl}_2 (1 \text{ atm}) | \text{Cl}^- (C_1) || \text{Cl}^- (C_2) | \text{Cl}_2 (1 \text{ atm}) | \text{Pt}$
- (a) $C_1 > C_2$ (b) $C_1 < C_2$
- (c) $C_1 = C_2$ (d) E_{cell} cannot be positive

Space for rough work
