

**CITY COLLEGE**  
**CHEMISTRY- HONOURS**

**B.SC Semester 3 Internal Assessment (online), under CU 2020-21**

**Paper: CC-3-6**

**(Inorganic Chemistry-3)**

**Full Marks – 10**

**Attempt all the questions.**

- 1) Match the geometry to the formula. Which pairing is correct?  
(a)  $[\text{BrF}_2]^+$ ; octahedral  
(b)  $[\text{ICl}_4]^-$ ; tetrahedral  
(c)  $\text{IF}_5$ ; trigonal bipyramidal  
(d)  $\text{BrF}_3$ ; trigonal bipyramidal
- 2)  $\text{SeCN}^-$  is an example of -  
(a) Polyhalide  
(b) Pseudohalide  
(c) Interhalogen compound  
(d) None of the above
- 3) Which of the following is pyrophosphoric acid?  
a)  $\text{H}_3\text{P}_3\text{O}_9$     b)  $\text{H}_5\text{P}_3\text{O}_{10}$     c)  $\text{H}_9\text{P}_2\text{O}_7$     d)  $\text{H}_4\text{P}_2\text{O}_7$
- 4) Boric acid on heating at  $150^\circ\text{C}$  gives :  
(a)  $\text{B}_2\text{O}_3$     (b)  $\text{H}_2\text{B}_4\text{O}_7$     (c)  $\text{HBO}_2$     (d)  $\text{H}_2\text{BO}_3$
- 5) Silicones resemble inorganic polymers in having high % of  
(a) Ionic character of Si-O bond    (b) Organic groups on silicon atoms  
(c) Controlled hydrolysis    (d) Solubility
- 6) F-Xe-F units involve –  
(a) 2C-3e bonds    (b) 4C-4e bonds  
(c) 3C-4e bonds    (d) 3C-2e bonds
- 7)  $\text{Li}_2\text{CO}_3$  on heating –  
(a) melts at high temperature    (b) decomposes to  $\text{Li}_2\text{O}$  &  $\text{CO}_2$   
(c) decomposes to  $\text{LiC}$  &  $\text{O}_2$     (d) polymerises
- 8) Ionisation enthalpy of X ..... its Electron Affinity enthalpy.  
(a) is equal to    (b) is greater than  
(c) is less than    (d) has no relation to
- 9) Zr and Hf are similar in radius due to –  
(a) Lanthanoid contraction    (b) the same atomic number  
(c) the same periodic position    (d) Inert pair effect
- 10) [18-Crown-6] means - (a)  
a compound with 18 atoms, 6 of which are metals (b) an

organic polyether ring with 18 atoms, 6 of which are O while the rest C (c)  
both of the above (d) none of the above