

**DPP-02****Only one correct**

1. BF₃ and BCl₃ are gaseous, BBr₃ is volatile liquid while BI₃ is solid. It is due to
 - (A) increased number of electrons, enhance the polarisability of the molecules.
 - (B) increased number of electrons, diminish the polarisability of the molecules.
 - (C) decreased number of electrons, enhance the polarisability of the molecules.
 - (D) decreased number of electrons, diminish the polarisability of the molecules.
2. Which of the following option is CORRECT about 1,2-dichloroethene

(A) cis > trans (B.P.)	(B) cis < trans (M.P.)
(C) cis > trans (solubility)	(D) all of these
3. Which of the following force of attraction is observed in H₇O₃⁺
 - (A) dipole-dipole
 - (B) ion-dipole
 - (C) H-bonding
 - (D) all of these
4. **Statement-1:** He and Ne do not form clathrate with phenol due to their small size
Statement-2: Ne can form clathrate with hydroquinone
 - (A) Statement-1 is true, statement- 2 is true and statement- 2 is correct explanation for statement-1.
 - (B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
 - (C) Statement-1 is true, statement-2 is false.
 - (D) Statement-1 is false, statement-2 is true.
5. The stability sequence of I₃⁻ > Br₃⁻ > Cl₃⁻ can be explained by
 - (A) Keesom force
 - (B) Debye force
 - (C) instantaneous dipole-induced dipole
 - (D) ion-induced dipole
6. **Statement 1:** CF₄ has lower boiling point than OF₂.
Statement 2 : Lower boiling point of CF₄ arises from its zero dipole moment
 - (A) Statement-1 is true, statement- 2 is true and statement- 2 is correct explanation for statement- 1.
 - (B) Statement-1 is true, statement-2 is true and statement-2 is NOT the correct explanation for statement-1.
 - (C) Statement-1 is true, statement- 2 is false.
 - (D) Statement-1 is false, statement-2 is true.



Multiple Choice



ANSWER KEY

1. A 2. D 3. D 4. B 5. D 6. A 7. ABCD
8. BD 9. ABCD 10. AB

