

<b>CHEMISTRY-11</b>	<b>Chapter#06 (Complete) Test-2</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 30</b>	<b>Marks Obtained:</b>	
Time Allowed: 60 Min.			

Maximum Marks: 06 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

**NOTE:** Tick The Correct Option:

- Which of the hydrogen halides has the highest percentage of ionic character?  
 (a) HCl (b) HBr (c) HF (d) HI
- VSEPR theory was proposed by:  
 (a) Kossel (b) Nyholm & Gillespie  
 (c) Lewis (d) Sidgwick
- The experimentally determined bond angle in  $\text{NH}_3$  is:  
 (a)  $109.5^\circ$  (b)  $107.5^\circ$  (c)  $104.5^\circ$  (d)  $102.5^\circ$
- Which one has greater value for an element?  
 (a) Atomic radius (b) Covalent radius (c) Cationic radius (d) Anionic radius
- The mode of hybridization in  $\text{BF}_3$  is:  
 (a)  $sp^3$  (b)  $sp^2$  (c)  $sp$  (d) None
- Ionic compounds do not show isomerism because ionic bonds are:  
 (a) Rigid and directional (b) Rigid and non-directional  
 (c) Non-rigid and non-directional (d) Non-rigid and directional

Maximum Marks: 24 **(SUBJECTIVE TYPE)** Time Allowed: 50 Min.

### SECTION-I

- Q.2: Give brief answers to the following questions: (16)**
- Define shielding effect?
  - Name the factors which control ionization energy.
  - No bond in chemistry is 100% ionic. Explain.
  - Write down two postulates of VSEPR theory.
  - Both  $\text{NH}_3$  and  $\text{BF}_3$  are tetra-atomic but have different structures. Why?
  - Differentiate between sigma ( $\sigma$ ) and pi ( $\pi$ ) bond.
  - Differentiate between bonding and anti-bonding molecular orbitals.
  - Define bond energy?

### SECTION-II

**NOTE:** Attempt All Questions: (08)

- Q.3: Define coordinate covalent bond. Explain with examples.**
- Q.4: What is dipole moment? Give its units. How does it explain the geometry of  $\text{CO}_2$  and  $\text{BF}_3$  molecule?**