CHEMISTRY-11	Chapter#06 (Complete-Smart Syllabus) Test-4		
	Name:	Class:	ID:
Date: / /	**Marks Total: 30**	**Marks Obtained:**	
Time Allowed: 50 Min.			

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

NOTE: Tick The Correct Option:

1) Which of the hydrogen halides has the highest percentage of ionic character?

(a) HCl (b) HBr (c) HF (d) HI

2) Which compound does not obey octet rule?

(a) NH_3 (b) BCl_3 (c) H_2O (d) CH_4

3) The number of bonds in oxygen molecule is:

(a) One sigma and one pi (b) One sigma and two pi

(c) Three sigma only (d) Two sigma only

4) In H_3O^+, each bond is _____ coordinate.

(a) 25% (b) 33% (c) 50% (d) 100%

5) In $HClO_4$, the coordinate covalent bonds are present between:

(a) Cl and H atoms (b) O and H atoms (c) Cl and O atoms (d) O and O atoms

6) The molecular geometry of SO_4^{2-} is:

(a) Bent or angular (b) Triangular pyramidal

(c) Triangular planer (d) Tetrahedral

7) The number of π bonds in CO_2 is equal to that in:

8) The mode of hybridization in NH_3 is:

(a) sp^3 (b) sp^2 (c) sp (d) None

9) . The energy difference between 2s and 2p orbitals for C_2 is:

(a) 1595 $kJmol^{-1}$ (b) 1195 $kJmol^{-1}$ (c) 846 $kJmol^{-1}$ (d) 554 $kJmol^{-1}$

10) The bond order of O_2^{2+} is:

(a) 0 (b) 1 (c) 2 (d) 3

Maximum Marks: 20 **(SUBJECTIVE TYPE)** Time Allowed: 40 Min.

SECTION-I

Q.2: Give brief answers to the following questions: (12)

i. Define shielding effect?

ii. Ionization energy is an index to the metallic character. Why?

iii. Why does electron affinity increase along the period while decrease down the group?

iv. Differentiate between polar and non-polar bond.

v. Write two points of valence bond theory.

vi. Why is MOT superior to VSEPR theory & VBT?

SECTION-II

NOTE: Attempt All Questions: (08)

Q.3: Define the term electronegativity. Discuss its variation in the periodic table.

Q.4: Discuss the main postulates of VSEPR theory and explain the structures of NH_3 on the basis of this theory.