CHEMISTRY-11	Chapter#06 (Complete-Smart Syllabus) Test-2		
	Name:	Class:	ID:
Date: / /	**Marks Total: 25**	**Marks Obtained:**	
Time Allowed: 40 Min.			

Maximum Marks: 09 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

1) Which of the following species has unpaired electrons in antibonding molecular orbital?

(a) O_2^{2+} (b) N_2^{2-} (c) B_2 (d) F_2

2) The compromise bond distance of two Hydrogen atoms is:

(a) 74.4 pm (b) 75.4 pm (c) 71.4 pm (d) 78.4 pm

3) Ionic, covalent and co-ordinate covalent bonds are present in:

(a) SO_2 (b) NH_4Cl (c) C_2H_2 (d) H_2O

4) The hybridization in ammonia molecule is:

(a) dsp^2 (b) sp^2 (c) sp^3 (d) sp

5) The bond order of N_2 molecule is:

(a) 1 (b) 2 (c) 3 (d) 4

6) The highest ionization energy values are possessed by the elements of group:

(a) IV A (b) VI A (c) VII A (d) VIII A

7) The E.N. difference between two atoms forming ionic bond:

(a) $=1.7$ (b) >1.7 (c) <1.7 (d) None

8) According to VSEPR theory, H_2O molecule belongs to:

(a) AB_2 Type (b) AB_3 Type (c) AB_4 Type (d) None

9) VBT explains:

(a) The shapes of the molecules. (b) The reason for bond formation.

(c) The paramagnetic behavior of oxygen. (d) Both 'a' & 'b'

Maximum Marks: 16 **(SUBJECTIVE TYPE)** Time Allowed: 30 Min.

SECTION-I

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

i. What is octet rule? Give two examples of the compounds that do not obey this rule.

ii. Why anionic size is greater than the parent atom?

iii. Define electronegativity. How does it vary along the period and down the group?

iv. What is the basic assumption of VSEPR theory?

v. Differentiate between sigma (σ) and pi (π) bond.

vi. Prove that bond order of He_2 is zero. Or Why He_2 molecule is not possible?

SECTION-II

NOTE: Attempt All Questions: (04)

Q.3: Define orbital hybridization. Discuss sp^3 hybridization in detail. Draw thw structure of methane molecule.