

NEET CHEMICAL BONDING AND MOLECULAR STRUCTURE — VALENCE BOND THEORY (VBT) AND ORBITAL OVERLAP — PYQS

Max. Marks: 12

Questions: 3

Section A (MCQ) — 3 questions

Q.1 Match **List-I** with **List-II** : [NEET (UG) 2026]

List-I		List-II	
A.	C ₂ H ₄	I.	3σ bonds, 2π bonds
B.	C ₂ H ₂	II.	3σ bonds, one lone pair
C.	CH ₄	III.	4σ bonds
D.	NH ₃	IV.	5σ bonds, 1π bond

(1) A-IV, B-I, C-III, D-II (2) A-III, B-IV, C-II, D-I

(3) A-II, B-III, C-I, D-IV (4) A-I, B-II, C-IV, D-III

 Scan or tap for the
full solution

Q.2 Which of the following species contains equal number of σ- and π-bonds ?

[AIPMT 2015 (Cancelled)]

- (1) (CN)₂ (2) CH₂(CN)₂
 (3) HCO₃⁻ (4) XeO₄

 Scan or tap for the
full solution

Q.3 The angular shape of ozone molecule (O₃) consists of

[AIPMT 2008]

- (1) 1σ and 1π bond (2) 2σ and 1π bond
 (3) 1σ and 2π bonds (4) 2σ and 2π bonds

 Scan or tap for the
full solution


ANSWER KEY

Ques.	1	2	3								
Ans.	1	4	2								