

PYQSide

JEE MAIN CHEMICAL BONDING AND MOLECULAR STRUCTURE — BOND PARAMETERS: BOND LENGTH, BOND ENERGY AND BOND ANGLE — PYQS

Max. Marks: 12

Questions: 3

Section A (MCQ)

Q.1 Given below are two statements :

Statement-I: $F_2O < H_2O < Cl_2O$ is the correct trend in terms of bond angle.

Statement-II: SiF_4 , SnF_4 and PbF_4 are ionic in nature.

In the light of the above statements, choose the correct answer from the options given below :

[JEE Main 2026 (Online) 6th April Evening Shift]

- (1) Both Statement-I and Statement-II are true
- (2) Both Statement-I and Statement-II are false
- (3) Statement-I is true but Statement-II is false
- (4) Statement-I is false but Statement-II is true

Scan or tap for the
full solution



Q.2 The covalent radii of atoms A and B are r_A and r_B , respectively. The covalent bond length and total length of AB molecule are respectively

[JEE Main 2026 (Online) 5th April Evening Shift]

- (1) $(r_A + r_B)$, $2(r_A + r_B)$
- (2) $\frac{1}{2}(r_A + r_B)$, $(r_A + r_B)$
- (3) $(r_A + r_B)$, $(r_A + r_B)$
- (4) $2(r_A + r_B)$, $\frac{1}{2}(r_A + r_B)$

Scan or tap for the
full solution



Q.3 The correct increasing order of C–H(A), C–O(B), C=O(C) and C≡N(D) bonds in terms of covalent bond length is :

[JEE Main 2026 (Online) 21st January Evening Shift]

- (1) $D < C < B < A$
- (2) $D < C < A < B$
- (3) $A < B < C < D$
- (4) $A < D < C < B$

Scan or tap for the
full solution



ANSWER KEY

Ques.	1	2	3										
Ans.	3	1	4										