

SEVEN STAR SK. P. C. PUBLIC SCHOOL BANI

INTERGRATED COACHING FRO NET, JEE, NDA, CUET, CLAT AND CA

TIME: 1:15 HR.

CLASS 11TH

MOCK TEST (JEE)

MM: 180

DATE: 27.06.2026

General Instruction:

- The question paper consists of multiple-choice questions, with each question having four options.
- The question paper contains 45 questions, 15 questions from Chemistry and 15 questions from Mathematics, 15 questions from Physics.
- Each correct answer will be awarded 4 marks, while 1 mark will be deducted for each incorrect answer.
- Candidates must carefully fill out the OMR Sheet with a black or blue ballpoint pen.
- Once an answer is marked on the OMR sheet, it cannot be erased or modified.
- Question marked with more than one options will be treated as wrong.

1. Among the following species, the one having the maximum bond angle is:

- A. NH_3
- B. H_2O
- C. BF_3
- D. SO_2

2. Which of the following molecules contains a central atom with sp^3d^2 hybridisation?

- A. SF_6
- B. XeF_4
- C. IF_5
- D. PCl_5

3. The shape of ClF_3 , according to VSEPR theory is:

- A. Trigonal planar
- B. T-shaped
- C. Seesaw
- D. Square pyramidal

4. Which of the following species violates the octet rule due to an expanded octet?

- A. BF_3
- B. BeCl_2
- C. PCl_5
- D. NO_2

5. The correct order of ionic character is:

- A. $\text{LiF} > \text{LiCl} > \text{LiBr} > \text{LiI}$

D. $\text{LiBr} > \text{LiCl} > \text{LiF} > \text{LiI}$

6. According to Fajan's rule, which compound is expected to have the maximum covalent character?

- A. NaCl
- B. MgCl_2
- C. AlCl_3
- D. KCl

7. Which statement is incorrect according to Valence Bond Theory?

- A. Bond formation involves overlap of orbitals.
- B. Greater overlap leads to stronger bonds.
- C. VBT explains magnetic properties of molecules completely.
- D. Covalent bond forms by sharing of electrons.

8. The hybridisation and geometry of the central atom in XeOF_4 are:

- A. sp^3d^2 , octahedral
- B. sp^3d^2 , square pyramidal
- C. sp^3d , trigonal bipyramidal