Shivaji College

University of Delhi

Department of Chemistry

Class Test (Academic year 2023-24)

Name of the Course: B.Sc. (P) Life Science with Chemistry

Name of the Paper: Chemical Bonding and elements in biological system

Date: 28.03.23 **Maximum Marks 08 Duration: 1 hr** UPC: 2172521201 Semester II A

Faculty Name Dr. Priyanka Kumari

General Instructions:

1. Attempt all questions.

2. Write Course Name, Semester, Date of exam, Title of paper, Roll number and your Name on the top of answer sheet.

Questions:

1. Using VSEPR theory give the shape of molecules 2 Marks

- XeOF₂ I)
- BrF₄ II)
- III) PCl₆
- IV) PO_4^{-3}

2. Derive the borne Lande's equation for lattice energy 2 Marks

3. Write short notes on 4 Marks

- (a) Radius ratio rules
- (b) Application of Fajan's rules