

Shivaji College
University of Delhi
Department of Chemistry
Class Assignment (Academic Tear 2023-24)

Name of Course:- B.Sc. Prog. Life Sciences with Chemistry Semester:- II ; **UPC:-** 2172521201

Name of Paper:- Chemical Bonding and Elements in Biological system

Faculty Name:- Dr. Seema.

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Q1) Write the main postulates of VSEPR Theory. Discuss geometry, hybridization and shape of
 XeO_3 , SF_6 , ClF_3

Q2) Discuss the stability order and magnetic behaviour of

a) N_2 , N_2^+ , N_2^-

b) O_2 , O_2^+ , O_2^{2-}

Q3) Draw the molecular orbital diagram of NO. Calculate its bond order and discuss the stability of
 NO & NO^+

Q4) Write short notes on

a.) Hydrogen bonding

b) Resonance Energy

c) s-p mixing of molecular orbitals.