Roll No. | | | | | | | | | | | | | **Total No. of Pages : 01**

Total No. of Questions : 08

B.Sc. (BT) (2018 & Onwards) (Sem.–1)

INORGANIC CHEMISTRY

Subject Code : BSBT-101-18

M.Code : 75324

Time : 2 Hrs. **Max. Marks : 30**

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE question(s), each question carries 6 marks.**

Q1) What is Effective Nuclear Charge? Calculate the effective nuclear charge for a 3d-electron in zinc atom.

Q2) What are the factors which effect the formation of covalent compounds?

Q3) What is Diagonal Hybridization? Discuss the structure of BeF_2 molecule.

Q4) Differentiate between atomic orbital and molecular orbital.

Q5) What are non-polar and polar covalent bonds? Give examples.

Q6) Compare the valence bond theory with molecular orbital theory.

Q7) Explain the term electronegativity. How is it related to electron affinity and ionization energy?

Q8) Differentiate between geometrical and optical isomers by taking suitable example.