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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 BeF₂ 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.

Note: Any student found attempting answer sheet from any other person(s), using incriminating material or involved in any wrong activity reported by evaluator shall be treated under UMC provisions.

Student found sharing the question paper(s)/answer sheet on digital media or with any other person or any organization/institution shall also be treated under UMC.

Any student found making any change/addition/modification in contents of scanned copy of answer sheet and original answer sheet, shall be covered under UMC provisions.