

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Non Medical) (Sem-1)

INORGANIC CHEMISTRY

Subject Code : BSNM-102-18

M.Code : 75743

Date of Examination : 16-06-2023

Time : 3 Hrs.

Max. Marks : 50

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying ONE mark each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What is the Pauli's exclusion Principle?
- b) Explain the Uncertainty Principle.
- c) Explain the orthogonal wave functions.
- d) Explain the Aufbau principle.
- e) Explain the solvation energy.
- f) What are dipole-dipole interactions?
- g) Explain Fajan's rule.
- h) What is bond order?
- i) What is the ccp packing?
- j) What is polarizability?

SECTION-B

2. Explain the LCAO method.
3. Explain the molecular orbital diagrams of O_2 .
4. Explain the semiconductors and insulators.
5. Explain Born Haber Cycle.
6. Explain Structure of calcium carbide.

SECTION-C

7. Explain the Born-Lande's equation.
8. Explain the Wurtzite structure and Zinc blende structure.
9. Explain the Molecular diagram of CO and F_2 .

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.