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Total No. of Pages : 02

Total No. of Questions : 18

B.Sc. (Non Medical) (2018 & Onwards) (Sem.-1)

INORGANIC CHEMISTRY

Subject Code : BSNM-102-18

M.Code : 75743

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

Define the following :

- 1) What is the De-broglie equation?
- 2) What is electronegativity?
- 3) What is Slater rule?
- 4) What are van der Waals forces?
- 5) What is radius ratio?
- 6) What are insulators?
- 7) What is Pauli's exclusion principle?
- 8) What is the significance of Effective nuclear charge?
- 9) What is cubic close packing?
- 10) What is the bond order?

SECTION-B

- 11) Explain the Cesium chloride structure by crystal lattices.
- 12) Explain the Fajan's Rule.
- 13) Explain Born-Haber cycle.
- 14) Giving reasons, explain that Radial angular wave functions.
- 15) Write a note on Hund's rule.

SECTION-C

- 16) Explain the following shape of :
 - a) s orbital and d orbital.
 - b) MO diagrams of O_2 .
- 17) Explain Wurtzite and Zinc blend structure.
- 18) Explain the VSEPR theory and its shortcomings.

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.