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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Non Medical) (Sem.-2)

INORGANIC CHEMISTRY-II

Subject Code : BSNM-201-18

M.Code : 76299

Date of Examination:13-12-2022

Time : 3 Hrs.

Max. Marks : 50

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying ONE marks 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 compounds are formed when Li, Na, and K combine with oxygen?
- b) Why does sodium metal form peroxide in preference to oxide?
- c) “*Boric acid is not an acid in the protonic concept*”, explain.
- d) “*Nitric oxide becomes brown when released in air.*” Explain.
- e) What are the d-d transitions?
- f) Explain the paramagnetic.
- g) What hard hard interactions are ionic?
- h) What is the coordination number?
- i) What is inert pair effect?
- j) Explain the paramagnetisms.

SECTION-B

- 2) Discuss the structure of AlCl_3 .
- 3) Explain the structure of SF_6 and SF_4 .
- 4) Explain the diborane.
- 5) Explain why the first ionization energy of copper is higher than those of alkali metals while second and third energies are lower.
- 6) Discuss the electronic configuration of Nb and Au.

SECTION-C

- 7) Explain the classification of acids and bases as hard and soft.
- 8) Explain the silicates.
- 9) Explain the complexes of Magnesium with EDTA.

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.