

term



केन्द्रीय जनजातीय विश्वविद्यालय आन्ध्रप्रदेश
Central Tribal University of Andhra Pradesh

(A Central University Established by an act of Parliament)

MID

Examinations-I

Name of the Programme : BSc 1st SEM Chemistry

Name of the Subject: Inorganic Chemistry-1

Subject Code: CHE101

Part-A

Answer all the questions. Each Carries 1 mark 1M X 5=5M

1. Why it is difficult to measure exactly the radius of an atom or molecule?
2. What happens to ionisation enthalpy when we move down the group? Give the reason.
3. Write any one radius ratio rule.
4. Draw the arrangement of hexagonal close-packed array?
5. Why ionic compounds are predominantly solids at room temperature?

Part-B

Answer either A or B short answer question. 5 M x 1=5M

6 A) Which is generally larger: Van der Waals radius or covalent radius, and what contributes to this difference?

OR

B) Explain the lower energy level of the 2s orbital in comparison to the 2p orbital.

Part-C

Answer either A or B long answer questions. 10M x 1=10M

7 A) Answer the following

- i) Calculate Z_{eff} for 3S electron in sodium
- ii) Describe the structure of I_3^- using VSEPR theory

OR

B) Describe basic principles of Molecular Orbital Theory (MOT). Draw the molecular orbital diagrams of O_2 and B_2 molecules.

