



ADITYA DEGREE COLLEGES

ANDHRA PRADESH

II SEMESTER - MID -1 EXAMINATIONS

I – B.Sc.,

Max. Marks : 60

Time : 2 Hr

Date: _____

GENERAL AND INORGANIC CHEMISTRY

SECTION – A

I. Answer any FIVE of the following:

5 x 4 = 20 M

1. Explain Mulliken, Allred-Rochow, Pauling scales of electronegativity?
2. Explain the significance of radial and angular wave functions.
3. Write Isoelectronic relationship ?
4. Explain Bohr Theory ?
5. Write the properties of Ionic compounds?
6. Define and Explain Ionisation potential?
7. Explain Melting and Boiling points of Ionic Compound ?
8. Write the factors favouring formation of Ionic bond?

SECTION – B

II. Answer all the following questions:

4 x 10 = 40 M

- 9 a) State and derive Schrodinger wave equation? (OR)
b) Explain the following
i) de-Broglie relation ii) Heisenberg's uncertainty principle
- 10 a) Explain the Born-Haber Cycle enthalpy of formation ionic compound?
(OR)
b) Define lattice Energy ? What are the factors affecting lattice energy?
- 11 a) Write the IUPAC Nomenclature, group Number, Horizontal, Vertical and diagonal relationships in the periodic table ?
(OR)
b) Write Aufbau, Pauli's exclusion principle and Hund's rule ?
- 12 a) Explain the Solubility and Thermal stability of ionic compounds ?
(OR)
b) Write Fajan's rule (Covalent character in Ionic Compounds) ?

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