



ADITYA DEGREE COLLEGES: ANDHRA PRADESH

II SEMESTER-MID-I-EXAMINATIONS

Date: 07-03-2025

Course: I BSC (Chemistry Minor)

Max. Marks: 60 M

Time: 2hrs

Subject: General Inorganic Chemistry

I. Answer any FIVE from the following questions

5 x 4 = 20 M

1. Explain about Aufbau principle?
2. Explain inert pair effect?
3. Write a note on ISO electronic species?
4. Explain electro negativity using Pauling scale?
5. Write a note on the thermal stability of ionic compounds.
6. Write about the melting points of covalent compounds.
7. Define ionization potential and explain $IE_2 > IE_1$
8. Write a note on diagonal relationship?

II. Answer all questions from the following.

4 x 10 = 40M

9. a) What is Schrodinger wave equation and derive the wave equation.

(OR)

b) Define periodic table and explain about s, p, d, f block elements?

10. a) What are ionic compounds & explain the properties of ionic compounds & factors favouring the formation of ionic compound?

(OR)

b) State Fajan's rule & explain Fajan's rule with postulates?

11. a) Define electron negativity & explain the factors influencing electron negativity.

(OR)

b) State & explain Bohr's theory & its limitations.

12. a) Write about Born-Haber cycle, enthalpy of formation of ionic compound & its stability?

(OR)

b) Write about lattice energy & factors affecting lattice energy?