Examinations-I

Name of the Programme: BSc 1st SEM Chemistry

Name of the Subject: Inorganic Chemistr-1

Subject Code: CHE101

Part-A

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

- 1. Give experimental evidences for dual nature of particle.
- 2. How Sommerfield explained fine structure of hydrogen spectrum?
- 3. What is De Broglie wavelength equation?
- 4. Explain the difference between orbit and orbital.
- 5. Write the Schrödinger wave equation.

Part-B

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

6 A) What is a well behave wave function?

OR

B) Discuss Heisenberg uncertainty principle. Explain its significance

Part-C

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

7 A) Outline Bohr's atomic theory, focusing on its postulates and contributions. Highlight briefly the limitations of the model and how later theories addressed these issues.

or

B) Explain the roles of radial and angular wave functions in defining atomic orbitals. Define orbitals and discuss how these functions contribute to the spatial distribution of electrons in an atom.