

Atomic Structure

Here is the topic tree of the **Atomic Structure** chapter from the Tamil Nadu State Board 11th Standard Chemistry textbook:

- 1. Introduction**
- 2. Discovery of Fundamental Particles**
 - Electron
 - Proton
 - Neutron
- 3. Atomic Models**
 - Thomson's Model
 - Rutherford's Model
 - Bohr's Model
 - Limitations of Bohr's Model
- 4. Quantum Mechanical Model of Atom**
 - Dual Nature of Matter and Radiation
 - Heisenberg's Uncertainty Principle
 - Schrödinger Wave Equation
- 5. Quantum Numbers**
 - Principal Quantum Number (n)
 - Azimuthal Quantum Number (l)
 - Magnetic Quantum Number (m)
 - Spin Quantum Number (s)
- 6. Shapes of Atomic Orbitals**
 - s, p, d, and f Orbitals
- 7. Rules Governing Electron Configuration**
 - Aufbau Principle
 - Pauli's Exclusion Principle
 - Hund's Rule
- 8. Electronic Configuration of Elements**
- 9. Ionization Energy, Electron Affinity, and Electronegativity**
- 10. Applications and Significance of Atomic Structure in Chemistry**

This structure follows a logical progression from historical discoveries to modern quantum mechanics and its applications. Let me know if you need any specific details from the document.