

- b) List the various characteristics of Nuclear Force 07
- Q-5 Attempt all questions (14)**
- a) Discuss in detail the Bohr's atomic model 07
- b) Explain in detail the concepts of Heizenberg's Gamma-Ray Microscope. 07
- Q-6 Attempt all questions (14)**
- a) Write a note on Stationary states in Quantum mechanics 07
- b) Discuss in detail the two-slit Interference of macroscopic particles and photons. 07
- Q-7 Attempt all questions (14)**
- a) Derive the general expression for Time-Dependent Schrödinger Equation. 07
- b) Normalize the given wave function: $\Psi = A e^{im\phi}$ 07
- Q-8 Attempt all questions (14)**
- a) Describe in detail the tunneling through a Rectangular Barrier 07
- b) Write a note on Quantum Dots and their significance. 07

