$Directorate\ of\ Distance\ Education\ (DDE)$

KUPPAM – 517 426:: A.P.

COURSE: II YEAR MSC PHYSICS

PAPER-I: QUANTUM MECHANICS

Answer any <u>THREE</u> of the following <u>FIVE</u> Questions.

3x10=30

- 1. Explain Dirac's Bra and ket renotation and mention its properties.
- 2. Describe the method of partial waves for scattering.
- 3. What is second quantization? Discuss the quantization of Schrodinger wave equation.
- 4. Discuss the significance method of partial waves for scattering.
- 5. Describe the construction of systematic and antisymmetric wave funtions.