

Directorate of Distance Education (DDE) KUPPAM – 517 426:: A.P. Two year PG Examinations DDE Course: I year Physics Paper – III Elementary solid state physics Question Paper for Assignment

Answer any **THREE** of the following **FIVE** Questions.

DRAVIDIAN

3x10=30

- 1. a) Explain Basis, Crystal Structure and primitive lattice cell?b) Discuss the Crystal Structure of Diamond?
- 2. Explain the Summerfield model of its Consequences in terms of electron lattice interaction?
- 3. Explain kronig Penney modal for electron moving in periodic potential fields?
- 4. a) Define intrinsic and extrinsic semiconductors?
 - b) Explain drift and diffusion charge carriers?
- 5. a) What is Heissner effect? Explain diamagnetic property of Super conductor? b) Write application of Super conductor?