



DRAVIDIAN UNIVERSITY

Directorate of Distance Education (DDE)

KUPPAM – 517 426:: A.P.

COURSE: II YEAR MSC PHYSICS

PAPER-II: NUCLEAR PHYSICS AND ANALYTICAL TECHNIQUES

Answer any THREE of the following FIVE Questions.

3x10=30

1. Discuss the principle and working of Mossbauer Spectrometer, outline the Application of Mossbauer Spectroscopy.
2. Discuss the Fermi's Theory of B-decay.
3. Discuss the construction, working and applications of photo Acoustic Spectroscopy.
4. Explain the properties of leptons and mesons.
5. What are the magic numbers? How do you establish their existence?