

DRAVIDIAN

UNIVERSITY

Directorate of Distance Education (DDE)

KUPPAM – 517 426:: A.P.

Two year PG Examinations DDE

Course: I year Physics

Paper – V Mathematical methods of physics

Question Paper for Assignment

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

3x10=30

- 1. Explain the Legendre equation for harmonic oscillator?
- 2. Define Fourier Service? Explain following applications of Fourier series?
 - a) Square wave
- b) Full wave rectifier
- 3. Write the Cauchy Riemann equations? Show that $f(z) = Z^2$ is analytic?
- 4. Derive Simpson's rule?
- 5. a) Explain identifiers and key words with examples?
 - b) Explain Declaration of variables and storage classes?