**DEPARTMENT OF PHYSICS**

**KURUKSHETRA UNIVERSITY, KURUKSHETRA**

**(Established by the State Legislature Act XII of 1956)**

**(“A” Grade, NAAC Accredited)**

The following topics of Paper-IV Option (i), Computational Methods and Programming-II, will be taught to the students of M.Sc.(Physics) IVth semester from 18/02/2015 to 28/02/2015 by Dr. Rajesh Kharab.

Potential energy of a dynamical system

Portraits in phase space: Undamped motion, Damped motion, Driven and damped oscillator

Taylor series method of numerical differentiation

Derivation of numerical differentiation formulae using method of undetermined coefficients

(Dr. Rajesh Kharab)