SYLLABUS

CALCULUS-II

(SEMESTER-II)

(P.U.)

PAPER II :

UNIT–I

Concavity, convexity and points of inflexion, Multiple points, Asymptotes, Tracing of curves (Cartesian and parametric co-ordinates only).

Curvature

Curvature of a curve at a point, radius of curvature of cartesian, parametric, polar curves and for implicit functions , evolute and involute, chord of curvature.

UNIT–II

Integral Calculus

Integration of hyperbolic and inverse hyperbolic functions.

Reduction Formulae

Numerical Integration

Trapezoidal, Prismoidal and Simpson Rules.

Application of Definite Integral

Summation of Series, Quadrature, rectification, volumes and surfaces of solids of revolution (Cartesian co-ordinates only)