

Department of Mathematics

Bridge Course Syllabus.

Time: 15 hr.

1. Matrices: (4 hour)

Types of Matrices, Operation on Matrices, Minor and Cofactor of Matrices, elementary row transformation, elementary column transformation.

2. Vectors: (4 hour)

Collinear and Coplanar Vectors, dot product of vectors, scalar product of vectors, triangle law of vector addition, parallelogram law of vector addition, unit vectors, vector fields.

3. Limit and Continuity: (3 hour)

Left hand limit, Right hand limit, continuity of a function at a point, discontinuity and its types, algebra of continuous functions.

4. Differentiation: (4 hour)

Derivative of composite function, chain rule of derivative, derivative of implicit function, derivative of explicit function, product and quotient of derivative.