

# **MILLIYA ARTS, SCIENCE AND MANAGEMENT SCIENCE COLLEGE, BEED**

## **Department of Mathematics**

### **The Outcomes UG course, B.Sc. in Mathematics**

After completion of B.Sc. with Mathematics as an optional subject, students are able to:

- Distinguish Differential Calculus, Integral Calculus and Vector Calculus
- Solve examples related to Differential Calculus, Integral Calculus and Vector Calculus.
- Differentiate function of two or more variables
- Solve differential equations with constant and variable coefficients
- Solve problems related to sphere, cone, cylinder and coincides.
- Understand Integral Transforms (Laplace Transforms, Fourier Transforms) and its applications to differential and partial differential equations.
- Solve Partial differential equations by different methods.
- Understand Group and Ring theory.
- Understand different Sequences (Bounded, divergent, convergent, Monotone, Cauchy) and learn to solve Problems related to the same.
- Solve IVP and BVP
- Understand theory and problems of divisibility and congruence.
- Understand a Concept of Metric Spaces.
- Understand Properties of Riemann Integrals and Problems related to the same.
- Solve problems related to Kinematics and dynamic of particles.
- Understand different Numerical Methods and numerical techniques to solve differential equations.