**SMT. M.M.K COLLEGE OF COMMERCE & ECONOMICS**

**Bridge Course in Basic Mathematics and Statistics**

***Syllabus***

***Module 1: Basic Mathematical Operations***

**Objective:** The main objective of this course is to bridge the 2 years gap between school and first year undergraduate syllabus of commerce, so that they can be comfortable when they start the subject in first year degree of commerce. Meanwhile they can be able to appear for competitive exams.

**Courses Outcome:**

After successful completion of the course, the learner shall be confident & enhanced with quantitative aptitude (numerical ability), catering to the needs of candidates who intend to appear for all the competitive or entrance examinations to get admissions to different professional courses. Students are trained with different data analysis techniques.

1.1 Sequence of mathematical operations — BODMAS

1.2 Basic Operations on fractions

1.3 Solving simultaneous Linear equations

1.4 Graph- Basic Graph plotting, Linear equation

1.5 Some standard functions and identities

1.6 Basic concepts of permutation and combination

1.7 Introduction of Derivatives

1.8 Simple and compound interest

1.9 Basics of Co-ordinate Geometry- Lines

1.10 Introduction to matrices and their basic operations

1.11 Algebra of indices (Exponents)

1.12 Ratio and proportion, Percentage, Profit & Loss, Logarithms

***Module 2: Basic statistical concepts***

2.1 Introduction to Statistics ( Collection,Classification,Tabulation of Data)

2.2 Presenting data in Graphical format (graph, diagrams, pie charts)

2.3 Basic concept of probability.