

## WMO ARTS AND SCIENCE COLLEGE

**MUTTIL, WAYANAD, KERALA-673122** 

## **DEPARTMENT OF ECONOMICS**

BRIDGE COURSE FOR UG (2022-2023)

( BASIC MATHEMATICS AND STATISTICS FOR ECONOMICS)

## Module I: Mathematics

Number system- Integers, real, rationals, irrationals

Basic operations-addition, subtraction, multiplication, division

Equations - simple, quadratic, simultaneous

Exponents - multiplication, division and power rules

Set theory - definition, types, operations

Matrices - definition, types, equality, addition, subtraction

**Graphs - lines, curves** 

Differentiation - standard results, problems with simple functions

## Module II: Statistics

Definition, collection, classification, tabulation.

Presentation -graphs and diagrams.

Analysis - methods, measures and tools

Measures -central tendency, dispersion, skewness, kurtosis.

Introduction -Correlation and regression, index numbers, time series.

Population, sample, Census, sampling and its methods.

Module III :Introduction of Softwares used for statistical data processing.

MS Office spreadsheet/Open office calc,R,SPSS,Python,Latek