## W M O Arts & Science College, Muttil

## **Department of Mathematics**

Syllabus of Bridge Course for Complementary Mathematics (2022-23)

**Duration: 12 Hours** 

**Tentative Period: September 2022** 

## **Topics**

- 1. Basic Arithmetic Addition of rational numbers, Multiplication of rational numbers & division of rational numbers
- 2. Functions Definition and Basic properties
- 3. Trigonometric functions Identities and properties
- 4. Quadratic equations and solutions
- 5. Polynomial functions
- 6. Limits and continuity of functions
- 7. Differentiation
- 8. Integration
- 9. Basic geometry Slope of a line, area, volume and surface area of solids
- 10. Fundamentals of graph Graphing in cartesian coordinates
- 11. Linear inequalities
- 12. Matrices Basic properties

Note: In addition to the sessions on the above topics, two entry level tests will be conducted to assess the level of students and necessary measures will be taken.