

DEPARTMENT OF MATHEMATICS

PROGRAMME OUTCOME

1. Students will simplify and evaluate Algebraic expressions. They will form and solve linear equations. They will also solve nonlinear equations using analytic methods.
2. Students will use mathematical concepts in Real World situations.
3. Students will apply Ratio and Proportion to problems in Health Sciences. Also, students will convert between Metric, Household and Apothecary units. They will compute Dosages.
4. Students will convert between Metric and English system units.
5. Students will demonstrate the ability to summarize and interpret Data.
6. Students will apply Basic Algebra and Geometry to problems in Radiological Sciences.
7. Students will use Percentages to solve Real Estate problems. Students will compute Taxes and Commissions on a property sale. Also, students will compute the appreciation and depreciation in Property Values.
8. Students will demonstrate the ability to solve Financial Math problems.
9. Students will demonstrate the ability to solve Exponential Growth and Decay problems. Students will demonstrate the ability to solve basic problems in Probability and Statistics.
10. Students will understand numbers, way of representing numbers, relationships among numbers and number systems. Students will use Mathematical Models to represent and understand quantitative relationships.
11. Students will relate Geometric ideas to number and measurement ideas. Students will measure length, perimeter, capacity, weight, area, volume, time, temperature and angle measures. Also, they will perform Euclidean constructions.
12. Students will compute and interpret average rate of change over an interval and instantaneous rate of change for a function at a point. Also, they will compute limits of functions as the independent variable approaches some finite value or infinity.
13. Students will simplify Circuit Diagrams using the rules for Capacitors and Resistors. Students will use Boolean Algebra to design and simplify Logic Circuits. They will apply Complex Numbers to computing the Impedance of a Circuit.
14. Students will demonstrate the ability to compute Derivatives and Integrals of real valued and Vector Valued functions of several variables. Students will demonstrate the ability to apply the techniques of multivariable Calculus to problems in Mathematics, Physical Sciences and Engineering.
15. Students will demonstrate the ability to formulate models of natural phenomena using Differential Equations analytically and numerically.