I

M.G.V'S ARTS, COMMERCE AND SCIENCE COLLEGE, MALEGAON CITY

PROGRAM OUTCOMES OF MATHEMATICS

B. SC. MATHEMATICS 2019 CREDIT PATTERN

PO1: A student be able to apply their skills and knowledge, that is, translate information presented verbally into Mathematical form, select and use appropriate Mathematical formulae or techniques in order to process the information and draw and the relevant conclusion.

PO2: A student should get adequate exposure to global and local concerns that explore them many aspects of Mathematical science.

PO3: On successful completion of these course student should be able to gain confidence in proving theorems and solving problems.

PO4: The student develop theoretical, applied and computational skills.

PO5: The mathematical maturity of students in their current and future courses shall develop.

I

COURSE OUTCOMES OF MATHEMATICS

F. Y. B. SC. MATHEMATICS

COURSE TITLE : MT-111 ALGEBRA

CO1 : Learn to solve system of linear equation.

CO2 : Learn to find Graphs, G. C. D and L. C. M by using maxima software.

CO3 : Introduction to Complex Analysis.

COURSE TITLE : MT-112 CALCULUS – I

CO1 : Gain knowledge of fundamental concepts of real numbers.

CO2 : Verify the value of limit of a function at a point using the definition of limit.

CO3 : learn to check function is continuous and understand the consequences of the intermediate value Theorem for continuous function.

MT-113 PRACTICAL COURSE BASED ON MT- 111 AND MT-112

CO1: Learn maxima software.

CO2: Problem solving on Algebra and Calculus by using maxima software.

CO3: Give knowledge of application of Mathematics.

I

COURSE OUTCOMES OF MATHEMATICS

F. Y. B. SC. MATHEMATICS

COURSE TITLE : MT-121 ANALYTICAL GEOMETRY

CO1: Introduction to Analytical Geometry of two dimension.

CO2 : Study of line in 2 and 3 dimensions.

CO3: Finding equations in various forms of line, circle, ellipse, sphere etc.

CO4: Give the knowledge of geometry using maxima software.

COURSE TITLE : MT-122 CALCULUS – II

CO1 : Students will be to understand Differentiation and fundamental theorem in differentiation and various rules.

CO2 : Geometrical representation and problem solving on MVT and Rolls Theorem.

CO3 : Introduction to ordinary differential equations.

MT-123 PRACTICAL COURSE BASED ON MT- 121 AND MT-122

CO1: Learn maxima software.

CO2: Problem solving on Analytical Geometry and Calculus by using maxima software.

CO3: Problem solving of analytical Geometry and Calculus-II.

I

COURSE OUTCOMES OF MATHEMATICS

S. Y. B. SC. MATHEMATICS

COURSE TITLE MT-231 CALCULUS OF SEVERAL VARIABLES

CO1: Gain knowledge of fundamental concepts of real numbers in n dimensions.

CO2: Verify the value of limit of a function at a point using the definition of the limit in R×R.

CO3: Find the Extreme values in 2 dimensions.

CO4: Study multiple integration.

COURSE TITLE MT-232(B) GRAPH THEORY

CO1: Students will be able to draw Graphs and count number of vertices and edges of a Graphs.

CO2: lists basic properties of trees.

CO3: Students will be able to solve problems of Traveling salesman problem.

COURSE TITLE MT-233 PRACTICAL COURSE BASED ON MT – 231 AND MT-232(B)

CO1: Problem solving on Calculus of Several Variables and Graph Theory.

CO2: Calculus of Several Variables and Graph Theory by using Maxima Software.

I

COURSE OUTCOME OF MATHEMATICS

S. Y. B. SC. MATHEMATICS

COURSE TITLE: MT- 241 LINEAR ALGEBRA

CO1: Introduction to vector space and subspace.

CO2 : Use computational techniques and algebraic skills essential for the study of systems of linear equations, matrix Algebra, vector spaces, Eigen Values and Eigen vectors, orthogonality and Diagonalization.

COURSE TITLE: MT- 242(A) VECTOR CALCULUS

CO1: Introduction to gradient vector.

CO2 : The student has knowledge of central concept in multivariable Calculus.

CO3: The students has the knowledge of vector field, curl and Divergence.

COURSE TITLE : MT-243 PRACTICAL COURSE BASED ON MT – 241 AND MT-242(A)

CO1 : Problem solving on Linear Algebra and Vector Calculus.

CO2: Problem solving by using maxima software base on Linear Algebra and Vector Calculus.

CO3: Give knowledge of application of Mathematics**.**