Course Outcome Department of Mathematics B.Sc. I/ II Semester Session 2022-23

B.Sc. I Semester:

Course Name (DSC): Calculus

On completion of the course, students will be able to

- (i) Draw curves in Cartesian and polar coordinate systems.
- (ii) Understand conceptual variations while advancing from one variable to several variables in calculus.
- (iii) Inter-relationship amongst the line integral, double and tripleformulations.
- (iv) Realize importance of Green's, Gauss and Stoke's theorems in other branches of Mathematics.

B.Sc. II Semester:

Course Name (DSC): Differential Equations

On completion of the course, students will be able to

- (i) Understand the genesis of ordinary differential equations.
- (ii) Learn various techniques of getting exact solutions of certain solvable first order differential equations and linear differential equations of second order.
- (iii) Learn about solution of first order linear partial differential equations using Lagrange's method
- (iv) Formulate mathematical models in the form of ordinary differential equations to problems arising in physical disciplines.

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Department of Mathematics

Programme Outcome

B.Sc. (Mathematics)

On completion of the programme, students will be able to

- PO1- Create, interpret and analyze graphical representation of functions and equations.
- PO2- Develop the knowledge of create Mathematical models to solve real-world problems.
- PO3- Understand the basic concepts, fundamental principles and Mathematical theories related to various mathematical phenomena and their relevance in day-to-day life.
- PO4- Develop the knowledge and understanding of axiomatic approaches in pure and applied Mathematics.
- PO5- Develop mathematical skill to solve problems.

M.Sc. (Mathematics)

On completion of the programme, students will be able to

- PO1- Solve problems in areas of mathematical science.
- PO2- Develop the skill of creativity and independence of thinking.
- PO3- Provide high quality of education in Mathematics within an environment of teaching.
- PO4- Apply knowledge of Mathematics to identify, analyze problems and to provide effective solutions in the area of Mathematics.
- PO5- Inculcate skills to excel in the fields of Mathematics and its enabled services Government And Private sectors), Teaching and Research.
- PO6- To crack competition examinations, lectureship and fellowship examination

Programme Specific Outcome

B.Sc. (Mathematics)

On completion of the programme, students will be able to

- PSO1- Student should be able to process recall basic idea about mathematics which can be displayed by them.
- PSO2- Student should have adequate exposure to many aspects of mathematical sciences.
- PSO3- Student is equipped with mathematical modeling ability, critical mathematical thinking and problem solving skill etc.
- PSO4- Student should be able to apply their skills and knowledge in various fields of studies including science, engineering, commerce and management.

M.Sc. (Mathematics)

On completion of the programme, students will be able to

- PSO1- Understand the basic concepts of advanced Mathematics.
- PSO2- Communicate effectively and to improve their competency skills to solve real world problem.
- PSO3- Develop the problem solving skill.
- PSO4- Solve critical problems by applying Mathematical tools.
- PSO5- Provide a systematic understanding of the concepts and theories of Mathematics.