GOVT NAVIN COLLEGE HASOUD

JANJGIR CHAMPA (C.G.)

DEPARTMENT OF MATHEMATICS

Program specific outcome:

PSO1. Understand mathematics idea from basic axioms.

PSO2. Identify the application of mathematics in other disciplines and society.

PSO3. Learn to solve improper integrals.

PSO4. Understand the concepts of algebra which include equation, numbers and algebraic structures.

PSO5. Student will be able to use the concept of analysis in solving problems.

PSO6. To understand the concepts of matrices and linear equations.

Course outcome:

B.Sc.1 year:

Core 1: Algebra and Trigonometry

CO1: To understand the type of the matrices in detail.

CO2: Determines hermitian and skew hermitian matrices.

CO3: Construct mapping on vector spaces.

CO4: To understand the groups and characteristics of a ring and field.

CO5: gains knowledge in the expansion of trigonometric functions.

Core 2: Calculus

CO1: To understand the continuous and discontinuous functions.

CO2: Tracing of curves in Cartesian and polar coordinates.

CO3: Integration of transcendental functions.

CO4: Understand the degree and order of the differential equations.

CO5: Determines linear differential equations of second order.

Core 3: Vector analysis and geometric

CO1: Gain knowledge about coordinate geometry.

CO2: To understand the vector and scalar product of three vectors.

CO3: Determines the vector integration.

CO4: Understand the sphere, cone, cylinders.

CO5: Gain thorough knowledge regarding straight lines and planes.

B.Sc. 2 year

Core1: Advanced Calculus

CO1: To understand the convergent and divergent sequence and series.

CO2: Understand the properties of continuous functions.

CO3: Limit and continuity of continuous functions.

CO4: Envelopes, Evolutes, Maxima, Minima and saddle point of functions of two variables.

CO5: Gain knowledge about beta and gamma functions.

Core2: Differential Equations

CO1: Series solution of differential equation.

CO2: Use the method of Laplace transforms and Inverse transform to solve differential equation.

CO3: Partial differential equations of first order, Lagrange solution and standard forms.

CO4: Learn the concept of solving higher order differential equations.

CO5: Determines the calculus of variations.

Core3: Mechanics

CO1: Gain knowledge about the nature of forces.

CO2: To understand the forces in three dimensions points central axis.

CO3: Learn the concept of simple harmonic motions.

CO4: Keplers laws of motions.

CO5: Determines the motion in a resisting medium.

B.Sc. 3 year

Core1: Analysis

CO1: To understand the series of arbitrary terms, Schwarz theorem and Fourier series.

CO2: Learn the concept of Riemann integral.

CO3: Determines concept of Riemann integral.

CO4: Gains knowledge in metric spaces.

CO5: To understand continuous function, Compactness and connectedness.

Core2: Abstract Algebra

CO1: Analysis mapping groups, abelian groups, symmetric groups and their properties.

CO2: Learn the concept of ring theory and modules.

CO3: Learn the concept of vector spaces.

CO4: To understand the linear transformations and their representation as matrices.

CO5: Gains knowledge of inner product.

Core3: Discrete Mathematics

CO1: Understand the concept of mathematical logic as connections, concepts of tautology.

CO2: Study the concept of relations and functions.

CO3: Gain the knowledge about finite and state machines.

CO4: To understand the recurrence relations.

CO5: Classify the concept of lattices and Boolean algebra.