महात्मा गांधी शासकीय कला एवं विज्ञान महाविद्यालय खरसिया,

जिला– रायगढ़ (छ.ग.)

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PROGRAM OUTCOME, PROGRAM SPECIFIC OUTCOME AND COURSE OUTCOME

<u>B. Sc. – 1 (MATHS)</u>

COURSE OUTCOMES

ALGEBRA AND TRIGONOMERRY

- 1. Students able to knowledge relation and function, group theory, ring theory, field theory etc.
- 2. Students are able to solving problem of matrix, Theory of auction.

CALCULUS :

- 1. To solving the problem of continuous and discontinuous.
- 2. To solving differentials equation of various orders.
- 3. Students able to knowledge to tracing of curve and find the area of surface of integral.

VECTUR ANALYSIS AND GEOMETRY

- 1. Learns the scalar and vector product and theorem of Gauss, Green, Stokes theorems and its solution.
- 2. Understand the general equation of conic, sphere cone, cylinder.
- 3. Student able to know central conchoids, paraboloids etc.

<u>B. Sc. – 2 (MATHS)</u>

COURSE OUTCOMES

DIFFERENTIAL EQUATINS

- 1. Student's able to solve Laplace transformation and inverse Laplace transformation, Bessel solution and various type of series solution of differential equation
- 2. Students are able to know the calculus of variations and solve them first and higher order of differential equation.

ADVANCE CALCULUS

- 1. Leans to complete the sequence and series of number and solve them.
- 2. Understand the concept of Envelopes, P.D. continuity of one variable and two variable
- 3. To sole problem of continuity, diffentiability Beta and Gamma function and solve them.

MECHANICS

- 1. Solve the problem of analytic conditions of equilibrium of coplanar force, virtual work, catenary, force in three dimensional Harmonic motion and elastic etc.
- 2. Understand at velocity, acceleration and solving their problems.

B.Sc.3rd MATHEMATICS

PROGRAM OUTCOMES OF MATHEMETICS

- Demonstrate basic manipulative skills in algebra, geometry, trigonometry and mechanic and beginning calculus.
- Apply the underlying unifying structures of mathematics lie, series, Fourier series, Riemann integral, convergence & diconvergences of improper integral, matric space, complex analytic function, connectedness and fixed points theorem etc and relationships among them.
- Demonstrate proficiency in writing proofs and communicate mathematical ideals both orally & in writing.
- Investigate and apply mathematical problems and solution in a variety of contexts related to science technology, business and industry, and illustrate these solution using symbolic, numerical or graphical methods and also theatrically.
- Investigate and solve unfamiliar math's problems.

PROGRAM SPECIFIC OUTCOME

- Think in a critical manner.
- Familiarize the student's with suitable tools of mathematical analysis to handle issues and problems in mathematics and related sciences.
- Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of mathematics and statistics.
- Provide student's sufficient knowledge and skill enabling them to undertake farther studies in mathematics and its allied areas on multiple disciplines concerned with mathematics.

- Encourage the student's to develop a range of generic skills helpful in employment, internship and social activates.
- This program will be also help students to enhance their employability for government jobs in banking insurance and investment sectors data analyst job's in various other public private enterprises.

B.SC 3 MATHS

COURES OUTCOMES

ANALYSIS

- 1. Students will be able to know the sequence and series, Fourier series of periodic function. Determine Riemann integral.
- 2. Students will be able to test convergence and diconvergence of improper integral.
- 3. Students are able to know analytic function, Mobius transformation, fixed points of theorem.
- 4. Students will learn the metric space complex function, completeness and complete ordered field.
- 5. Student's will be able to know that dense subset, first & second countable space also know compact space, extension theorem etc.

ABSTRUCT ALGEBRA

- 1. Students will learn group theory, Solow's theorem, ideals, modules, vector space, normal group, Abelian group, ring theory etc.
- 2. Student's skill to solve any theorem by using above concept and also to solve problem of matrix, transformation orthogonal vectors etc.

DISCERETE MATHEMATICS

- 1. Students will have knowledge of graphs theory, trees, etc.
- 2. Student will know about the lattices, set's and proposition, relation and functions
- 3. Student able to solve Boolean algebras, recurrence relations and reccursive algorithms.

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