RAYBURN COLLEGE
New Lamka, Churachandpur, Manipur -795 006, INDIA.
Affiliated to M.U: No. MU/1-65/98/CDC/136:07.08.2012. Recognized
by UGC under Section 2(f) & 12(B) of 1956 Act: No.8-29/2015(CPP-I/C):23/04/2015.
& COHSEM: No. 3/7/92-HSC:28.07.1995,
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DEPARTMENT OF MATHEMATICS

COURSE OUTCOME

SEMESTER-II :: ELECTIVE PAPER

TITLE : CALCULUS (SUBJECT CODE: MAT-202)

On completion of the course, students will
1. find different applications of Calculus
2. be able to understand Differential & Integral Calculus
3. appreciate the use of ODE

SEMESTER-I :: ELECTIVE PAPER

TITLE : ALGEBRA (SUBJECT CODE: MAT-101)

On completion of the course, students will be able to
1. find different application of Algebra
2. differentiate the areas of classical and modern
3. apply Trigonometry in real life geometrical problems

SEMESTER-II :: ELECTIVE PAPER

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On completion of the course, students will
1. find different applications of Calculus
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3. appreciate the use of ODE

SEMESTER-III :: ELECTIVE PAPER

TITLE : GEOMETRY (SUBJECT CODE: MAT-303)

On completion of the course, students will understand
1. the concept of probability
2. the geometrical interpretation of vectors
3. how to visualize different dimensions

SEMESTER-IV :: ELECTIVE PAPER

TITLE : MECHANICS (SUBJECT CODE: MAT-404)

On completion of the course, students will
1. know the difference between Statics and Dynamics
2. find the use of Rigid Dynamics
3. be able to connect Physics and Mathematics in problem solving

SEMESTER-V :: HONOURS PAPER

TITLE:
1. Abstract Algebra and Linear algebra (SUBJECT CODE: MAT-505)

On completion of the courses, students will understand
1. Abstract mathematical problems
2. Groups theory and rings theory
3. Views of mathematics not only as about numbers
4. Linear transformation of R-space
5. Projection of vectors
6. Orthonormal vectors and Quadratic forms

TITLE:
2. Real Analysis (SUBJECT CODE: MAT-506)

On completion of the courses, students will be able
1. To begin counting number to infinity.

2. To use sequence as real value problem.
3. To understand Riemann integral and its uses
4. To evaluate Improper integrals
5. To understand Countable and uncountable sets
6. To apply Archimedean property

TITLE:
3. Numerical analysis and C programming (SUBJECT CODE: MAT-507)

On completion of the courses, students will be able

1. To understand interpolation and newton method of it.
2. To solve mathematical problem in Programming
3. To employ Simpson' s rule of integration
4. To practise C-programming
5. To apply Differential equation in Programming

SEMESTER-VI :: HONOURS PAPER

TITLE:
1. PDE , Laplace transform and Calculus of variation (SUBJECT CODE: MAT-605)

On completion of the courses, students will be able

1. To find CI and PI in PDE
2. To understand heat flow and wave equation
3. To understand Euler Lagrange equation
4. To differentiate Homogenous and non-Homogenous PDE
5. To evaluate minimizing and maximizing of functions

2. Metric Space and Complex Analysis (SUBJECT CODE: MAT-606)

On completion of the courses, students will be able

1. To understand the meaning of open and close sets.
2. To understand the Bolzano Weistrass theorem
3. To understand conformal mapping like circle to line
4. To understand convergence of Cauchy sequence.
5. To understand singularities and Laplace equation

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TITLE: OPTIONAL PAPER (SUBJECT CODE: MAT-610)