

Department of Mathematics, Bethune College.

PO & CO of Mathematics, UG, OLD

Name of the Programme	Year of Introduction	Status of implementation in CBCS Curriculum (YES/NO)	Programme outcome	Course outcome		
				Course Code	Course Name	Course Outcome
B.Sc. Mathematics (Hons)	2010	NO	<p>1. Students will be entirely equipped with the knowledge of all the branches of Mathematics</p> <p>2. This programme will provide a very strong foundation in Mathematics</p> <p>3. Students would have a strong understanding of using mathematical equation in Algebra and Calculus</p> <p>4. Students will be equipped with mathematics skills and techniques which can be applied in both academic and non-academic areas of work.</p>	MODULE I	CLASSICAL ALGEBRA MODERN ALGEBRA	To acquaint students with the basic knowledge of classical algebra and modern algebra
				MODULE II	Analytical Geometry of Two Dimensions Analytical Geometry of Three Dimensions	This topic will help t the students to improve their basic conception of the said subjects.
				MODULE III	Analysis I Evaluation of Integrals	This is the foundation knowledge of real analysis
				MODULE IV	Linear Algebra Vector Calculus I	. This topic will help t the students to improve their basic conception of the said subjects
				MODULE V	Modern Algebra II Linear Programming and Game Theory	Linear programming provides a method to optimize operations within certain constraints. It is used to make process efficient and cost effective. Some areas of application for linear programming include food and agriculture,

			5. Students will have placements scopes in academic areas include jobs as teaching faculties in schools,	MODULE VI	Analysis II Differential Equations I	It introduces for basic knowledge of the said topic such that they can apply it in mathematical methods of physical problems
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				MODULE VII	Real-Valued Functions of Several Real Variables Application of Calculus	To provide students with detailed understanding in real numbers, sequences and sub-sequences along with idea of convergence of infinite series It introduces for basic knowledge of the said topic such that they can apply it in mathematical methods of physical problems
				MODULE VIII	Analytical Geometry of Three Dimensions II : Analytical Statics I Analytical Dynamics of A Particle I	To acquaint students with the basic knowledge of GEOMETRY and STATICS AND DYNAMICS OF PARTICLE
				MODULE IX	Analysis III	To provide students with detailed understanding in real numbers, sequences and sub-sequences along with idea of convergence of infinite series
				MODULE X	Linear Algebra Modern Algebra II Tensor Calculus Differential Equation II	Students will get to know about the application of ISBN, ISSN, credit card no. etc. and do solutions of system of equations with the help of rank of matrix.
				MODULE XI	Vector calculus II Analytical Statics II Analytical Dynamics of A Particle II	Understand thr mathematical and physical foundations of mechanics

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MODULE XII	Hydrostatics Rigid Dynamics	To construct the mathematical modeling of many physical phenomenon
MODULE XIII	Analysis IV Metric Space Complex Analysis	In mathematics, a metric space is a set where a distance is defined between elements of a set. Metric space method have been employed for decades in various application , for example in internet search engines, image classifications etc
MODULE XIV	Probability Statistics	Application of probability theory in everyday life is reliability and in business it used in the calculation of long term gains and losses

				MODULE XV	Numerical Analysis Computer Programming	Student can know that it is used for computer science for root finding Also they can know that it is used for multi dimensional root finding
				MODULE XVI	Practical (50 marks)	Students can learn the write of programe in C language and can apply it for solution of algebraic , transcendental and ordinary and partial diff equation

Prof. Pratap Chandra Ray

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DEPT OF MATHEMATICS,

Bethune College

