



ADD ON COURSE ON PRELIMINARIES OF APPLIED MATHEMATICS

Organized by
Department of Mathematics, Mangaldai College

COURSE COMMITTEE:

Joint Course Coordinators:

Mr. Debajit Nath, HOD
Department of Mathematics,
Mangaldai College

Mr. Jintu Mani Nath, Assistant
Professor, Department of
Mathematics, Mangaldai College

Members:

Mr. Dimbeswar Kalita, Assistant.
Professor, Department of
Mathematics, Mangaldai College

INTRODUCTION

Applied mathematics is a discipline devoted to the use of mathematical methods and reasoning to solve real-world problems of a scientific or decision-making nature in a wide variety of subjects, principally (but not exclusively) in engineering, medicine, the physical and biological sciences, and the social sciences. Applied mathematical modeling often involves the use of systems of differential equations to describe and predict the behavior of complex real-world systems that unfold dynamically in time.

PROGRAMME OBJECTIVES:

Student who choose Add on course Programme in Mathematics and Statistics, develop the ability to think critically, logically and analytically. The Programme covers Calculus, Differential equation and its application, Matrices and its applications.

Syllabus of the Course

THEORY

UNIT 1: Derivative of various functions and its basic application, Integration of various functions and its applications, Differential equations and its applications.

UNIT 2: Definition and Types of Matrices, Algebra of Matrices, Minor, Cofactor and inverse of Matrices, Determinant.

PRACTICALS

List of Practicals (using any software)

1. Plotting of second order solution family of differential equation.
2. Plotting of third order solution family of differential equation.
3. Find the operations (transpose, determinant, inverse etc.) of distinct matrices.

STUDENT PARTICIPANTS:

The course is open to all students of Mangaldai College pursuing under graduation.

DURATION OF THE COURSE:

The duration of the course is of three months with 30 hours with two classes in a week.

Course Fee: RS. 300/-

For more information contact:

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