

**SACRED HEART COLLEGE (AUTONOMOUS)
DEPARTMENT OF MATHEMATICS**

Basic Aptitude Techniques in Mathematics

Course code- 18MATVAC01

Course objectives

This course is intended to introduce the basic concepts of numerical analysis and its applications

Course outcomes

As outcomes of this course the student should master the following:

- 1) To identify different root finding techniques
- 2) To evaluate solutions of transcendental equations
- 3) To find interpolating polynomials

Text book


Introductory methods of Numerical Analysis , S S Sastry

Module-1 (15 hrs) (section 2.1 -2.5)

Solution of Algebraic and transcendental equations, Bisection method, method of false position, fixed point iteration, Newton Raphson method

Module -2 (15 hrs) (section 3.3,3.6, 3.9.1,3.10)

Finite differences, Newton's formula of interpolation, Lagrange's interpolation formula
,Divided difference formula.



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