Semester-II

19CHU611 MATHEMATICS-II - PRACTICAL **4H -2C**

Instruction Hours / week: L: 0 T: 0 P: 4 **Marks:** Internal: **40** External: **60** Total: **100**

End Semester Exam: 3 Hours

Course Objectives

This course enables the students to learn

- To solve simultaneous linear algebraic equations using various methods.
- To evaluate definite integrals using numerical techniques.
- Problem-solving through (computer language) programming.

Course Outcomes (COs)

On successful completion of this course, the student will be able to

- Familiarize with the programming environment for numerical methods.
- Develop proficiency in skills to solve the algebraic equations.
- Evaluate the definite integrals using computer programming techniques

List of Practical

1. Compute Fourier Coefficients.
2. Solution of simultaneous linear algebraic equations – Gauss Elimination method
3. Solution of simultaneous linear algebraic equations – Gauss Jordan method
4. Solution of simultaneous linear algebraic equations – Gauss Jacobi method
5. Solution of simultaneous linear algebraic equations – Gauss Seidal method
6. Numerical Integration – Simpson's one third rule
7. Numerical Integration – Simpson's three eighth rule
8. Numerical Integration – Trapezoidal rule