LORETO COLLEGE
Department of Mathematics

TIME PLAN 2019-2020

Name of the teacher : Dr Satyabrota Kundu
Initials   : SK

Teaching Objective:
- To impart comprehensive knowledge in theoretical and empirical perspectives on the core mathematical issues.
- To indoctrinate the fundamental mathematical tools required for empirical appraisal of various mathematical problems.
- To give exposure to analytical and logical matters subsumed in mathematical theories.

3rd Semester Topic-wise Time Plan

Topics	Hours allotted	Topics (as per curriculum)	Teaching method	Learning outcome (output)	Assessment
Integral Calculus	**10**	1. Evaluation of definite integrals. 2. Integration as the limit of a sum (with equally spaced as well as unequal intervals). 3. Reduction formulae 4. Improper	Class lecture and problem solving sessions. Revisions and doubt clearing slots	Achieve a fervent understanding of basic integral calculus.	Class test and home assignments

Numerical Methods	25	1. Approximate numbers, Significant figures, Rounding off numbers. Error : Absolute, Relative and percentage. 2. Operators. 3. Interpolation. 4. Numerical	Class lecture and problem solving sessions. Revisions and doubt clearing slots	Getting skilled in problem solving techniques	Class test and home assignments

| Linear Programming | 25 | 1. Motivation of Linear Programming problem. Statement of L.P.P. Formulation of L.P.P. Slack and Surplus variables. L.P.P. is matrix form. Convex set, Hyperplane, Extreme points, convex Polyhedron, Basic solutions and Basic Feasible Solutions (B.F.S.). Degenerate and Non-degenerate B.F.S. 2. The set of all feasible solutions of an L.P.P. is a convex set. The objective function of an L.P.P. assumes its optimal value at an extreme print of the convex set of feasible solutions, A.B.F.S. to an L.P.P. corresponds to an extreme point of the convex set of feasible solutions. 3. Fundamental Theorem of L.P.P. (Statement only.) | Class lecture and problem solving sessions. Revisions and doubt clearing slots | Developing a strong aptitude in making basic aspects of LPP. | Class test and home assignments |