

M-106 Integral Calculus

Course description:

The definite integrals, fundamental theorem of calculus, the indefinite integrals, change of variables, numerical integration. Area, volume of revolution, work, arc length. Differentiation and integration of inverse trigonometric functions. The logarithmic, exponential, hyperbolic and inverse hyperbolic functions. Techniques of integration: substitution, by parts, trigonometric substitutions, partial fractions, miscellaneous substitutions. Indeterminate forms, improper integrals. Polar coordinates.

Text Book: Calculus by Swokowski-Olinick-Pence (Sixth Edition)

Note the ingredient of our assessment of students will be the following:

Tutorial.....	10 marks.
First-Mid Term Exam.....	20 marks.
Second Mid Term Exam.....	20 marks
Final Exam.....	50 marks
	Total=100 marks.