

Math 201(Differential and Integral calculus)

The Book :Calculus ,The classic edition by Swokowski.

Course Description:

Cartesian ,cylindrical and spherical coordinate systems. Functions of two and three variables. Limits and continuity, partial derivative, the chain rule, extrema of functions of two variables, Lagrange multiplier. Double integral, double integrals in polar coordinates, triple integral. Sequences, infinite series, convergence test, representation of functions by power series. Taylor and Maclurain series.

Distribution for marks:

20 marks for First Mid Term.

20 marks for Second Midterm.

5 marks for two quizzes in the lectures.

15 marks for tutorials.

40 marks for Final Exam.

Exercises for Tutorial

section	Exercises
11.1	3,5,7,11,12,13,14,16,17,18,20,22,23,24,26,27,28,29,30,31,32,33,34,35,36,37,38,41,42.
11.2	2,4,5,6,8,10,14,15,18,20,25,28,30,34,37,38,39,40,42,43,45,46,50,53,54.
11.3	2-11,14,15,16,18,20,22,23,24,25,26,30,31,33,34,35,39,40,42,43,45,46,57,58.
11.4	2,4,6,8,9,10,11,12,14,15,16,18,20,21,22,23,25,27,28,29,31,32,32,33,34,35,38
11.5	2-7,9,10,12,13,14,16,18,19,20,21,22,27,28,29,32,33,34,35,38,40,41,43,44,45,46.
11.6	5,6,7,8,14,15,19,23,25,27,30,35,36,41,42,44,45,46.
11.7	2,4,6,7,10,13,14,16,19,22,25,29,30,32,33,34,37.
11.8	7,9,13,15,17,33,34,41,42.
16.1	1,3,5,8,9,14,21,22,23,24,26,27,37.
16.2	3,5,6,9,12,14,16,19,20,23,24,25,26,28,29,36,38,42.
16.3	4,6,8,12,13,16,17,21,22,27,29,32,34,36,39,42,44.
16.4	2,9,11,12,16,18,20,39,41.
16.5	2,4,6,10,12,14,18,19,22,33,36,37,38,41,42.
16.8	1,6,9,15,18,21,23,24,26,29,31,32.
17.1	1-10,13,16,18,19,20,21,23,25,26,27,29,31,32,33,37,38,39,43,44,50.
17.2	2,4,6,7,11,14,18,22,24,27,28,30,31,32.
17.3	13,15,17,18,19,21,23,24
17.5	2,6,7,8,9,11,12,13,14,16,17,23,26,28.