

Tentative Weekly Lectures Schedule

 BOOK: Calculus Early Transcendental 11th Edition

Week	Contents/Topics	Exercises/Questions	CLO
1	Interval, Inequality, Relation and Functions, One-One and onto function.	Appendix E (Q23-44) Appendix F (Q17-36)	01
2	Vertical line test, Piecewise function, Absolute value function, Domain and Range of functions, Symmetry, Even/odd function, Asymptote	0.1 (1-04, 7-10, 27,28) 0.2(5-18, 27-34,53,63,66,67) 0.4(9 to 16)	02
3	Concepts of limit. Evaluation of limits. Continuity and points of discontinuity. Types of discontinuity.	1.1 (1-16) 1.2 (1,3-32) 1.5 (1-6,11-22, 29,30,35,36)	03
4	Rules and techniques of differentiation. Product and quotient rule. Derivative of trigonometric and logarithm function	2.3 (1-24, 41-47) 2.4 (1-24) 2.5 (1-24)	03
5	Chain rule Implicit differentiation. Indeterminate forms, L' Hospital Rule	2.6 (7-40) 2.7 (3-18,27-30) 6.5 (7-43)	03 04
6	SESSIONAL EXAM 1		
7	Application of derivatives, Role's and Mean Value's Theorem	2.8 (10-20), 3.8 (1-8)	04
8	Concavity, Increasing and Decreasing. Relative Extreme (1 st and 2 nd derivative test) Absolute Maxima and Minima	3.1 (15-26) 3.2 (7-12, 25-32)	04
9	Riemann sums	4.4 (35-48)	04
10	Techniques of integration, Basic Integration, Integration by parts Reduction formula, Trigonometric substitution	7.1 (1-30), 7.2 (1-30, 69-71) 7.4 (1-25,37-48)	03
11	SESSIONAL EXAM 2		
12	Area bounded by the curves. Volume by Disk and washer method	5.1 (1-14), 5.2 (1-20)	04
13	Integration of Rational function by Partial fraction, $u = \tan(x/2)$ substitution, Improper integrals.	7.5 (9-30), 7.6 (65-70) 7.8 (3-32)	03
14	Infinite Sequences and Series, Introduction to Sequences Infinite series, The integral test	9.1 (7 to 19) 9.3 (1-14) 9.4 (9 to 22)	05
15	Comparison tests, Absolute convergence, The ratio and root test	9.5 (5 to 20)	05
16	Revision		
	Final Exam		