

National University of Computer & Emerging Sciences MT-1003 Calculus and Analytical Geometry Fall 2023



Course Content for Sessional Exam - II

Contents/Topics	Exercises
Indeterminate forms, L' Hospital Rule	6.5 (7-43)
Application of derivatives, Role's and Mean Value's	2.8 (10-20)
Theorem	3.8 (1-8)
Concavity, Increasing and Decreasing. Relative Extreme (1st	3.1 (15-26)
and 2nd derivative test)	3.2 (7-12, 25-32)
Riemann sums	4.4 (35-48)
Techniques of integration, Basic Integration, Integration by	7.1 (1-30),
parts Reduction formula, Trigonometric substitution	7.2 (1-30, 69-71)
	7.4 (1-25, 37-48)