

2	Matrices and Determinants	10
	<ul style="list-style-type: none"> • Definition of Matrix • Types of Matrix (Square, Row, Column, Zero, Diagonal, Scalar, Identity, Transpose, Symmetric, Skew-symmetric) 	2
	<ul style="list-style-type: none"> • Arithmetic operations of Matrices (Addition, Scalar Multiplication, Matrix Multiplication) 	3
	<ul style="list-style-type: none"> • Introduction to Determinants with Basic properties • Invertible matrix 	1
	<ul style="list-style-type: none"> • Computation of Inverse using Definition • Simultaneous Solution of set of Linear equations using Cramer's Rule • Matrix inversion method • Rank of Matrix 	4
3	Co-ordinate Geometry	10
	<ul style="list-style-type: none"> • Introduction to Co-ordinates • Quadrants and Lines • Distance formula in R² (without proof) 	2
	<ul style="list-style-type: none"> • Section formula (without proof) 	1
	<ul style="list-style-type: none"> • Area of triangle (without proof) and related example 	2
	<ul style="list-style-type: none"> • General Equation of a straight line • Slope and intercepts of a line 	2
	<ul style="list-style-type: none"> • Parallel Lines • Perpendicular Lines • Angle between two lines (without proof) and related examples 	3
	Simple examples should be asked for above concepts	
4	Limit, Differentiation and Integration	10
	<ul style="list-style-type: none"> • Limit <ul style="list-style-type: none"> o Concept of Limit o Some standard Limits (without proof) o Continuity of a function and related examples 	2
	<ul style="list-style-type: none"> • Differentiation <ul style="list-style-type: none"> o Definition of Derivative o Rules for Differentiation (without proof) o Differentiation of composite functions o Higher order derivatives till order 2 	5
	<ul style="list-style-type: none"> • Integration <ul style="list-style-type: none"> o Introduction to indefinite integral o Definition of Integration & Methods of integration o Substitution Methods o Some standard Formulae (without proof) and example based on the standard forms o Introduction to definite integration and simple examples on it 	3

TEXT BOOK/S:

Business Mathematics (Latest Edition)
Publisher : S.Chand and Sons Publications
By: D.C. Sancheti & V.K Kapoor

REFERENCE BOOKS:

Elementary Engineering Mathematics
Publisher : Khanna publisher
By : BS. Grewel