

CONTENTS

MATHEMATICS

ALGEBRA	3–126	Section (II) : Convergence Series	323–343
1. Sets	3–7	11. Convergence of Series	323–343
2. Relation and Function	8–12	Section (III) : Integral Calculus	344–407
3. Number Theory	13–38	12. Indefinite Integrals	344–362
4. Surds	39–40	13. Definite Integrals	363–376
5. Progressions	41–52	14. Rectification, Quadrature, Volume and Surfaces	377–394
6. Exponential and Logarithmic Series	53–57	15. Multiple Integration	395–403
7. Permutations and Combinations	58–68	Miscellaneous Exercise	403–407
8. Binomial Theorem	69–73	DIFFERENTIAL EQUATIONS	408–445
9. Theory of Equations	74–96	GEOMETRY	446–595
10. Miscellaneous	97–99	Section (I) : Analytic Plane Geometry	446–539
11. Inequalities	100–102	1. Fundamental Concepts of 2D	452–457
12. Recurrence Relation	103–107	2. The Straight Line	458–468
13. Group	108–119	3. Pair of Straight Lines	469–474
14. Ring and Field	120–126	4. The Circle	475–490
LINEAR ALGEBRA	127–171	5. The Parabola	491–499
1. Matrices and Determinants	127–163	6. The Ellipse	500–513
2. Linear Algebra	164–171	7. The Hyperbola	514–525
TRIGONOMETRY	172–194	8. Polar Equations	526–533
CALCULUS	195–407	Miscellaneous Exercise	533–539
Section (I) : Differential Calculus	195–322	Section (II) : Analytical Solid Geometry	540–595
1. Function	195–203	9. Fundamental Concepts of 3D	540–548
2. Limit, Continuity and Differen- tiability	204–227	10. The Plane	549–555
3. Rolle's Theorem, Mean Value Theorem, Taylor's Theorem	228–237	11. The Straight Line	556–566
4. Tangents and Normals	238–250	12. The Sphere	567–577
5. Maxima and Minima	251–259	13. The Cone	578–586
6. Curvature	260–270	14. The Cylinder	587–592
7. Asymptotes	271–281	Miscellaneous Exercise	592–595
8. Singular Points	282–292	MECHANICS	596–620
9. Curve Tracing	293–305	Section (I) : Vector Algebra	596–620
10. Partial Differentiation	306–316	Vector Algebra	596–620
Miscellaneous Exercise	316–322		

**STATISTICS AND
PROBABILITY**

1. Measures of Dispersion	621–626	6. Random Variables and Distribution Functions	651–656
2. Skewness and Kurtosis	627–628	7. Mathematical Expectation and Generating Functions	657–660
3. Curve Fitting and Method of Least Square	629–630	8. Binomial, Poisson and Normal Distributions	661–664
4. Correlation and Regression	631–636	NUMERICAL ANALYSIS	665–669
5. Probability	637–650	LINEAR PROGRAMMING	670–675

REASONING TEST

1. Alphabet Test	3–11	11. Statement and Conditions	101–110
2. Spotting out the Dissimilar	12–14	12. Arguments	111–115
3. Analogy Test	15–17	13. Statement and Assumptions	116–122
4. Coding and Decoding Test	18–28	14. Mathematical Test	123–125
5. Number Series and Time	29–33	15. Series Test	126–128
6. Blood Relation Test	34–38	16. Accuracy of Statement and Venn Diagram	129–130
7. Ordering Test	39–56	17. Five Options Test	131–134
8. Syllogism	57–79	18. Sentences or Numbers Configuration Test	135–138
9. Questions Based on Passage and Course of Action	80–93	19. Statement and Conclusion	139–144
10. Direction Test	94–100		
