Contents

•	Previous Years' Papers Fully Solved	1		4. Increasing and Decreasing,	
	MATHEMATICS			Maxima and Minima	194
•	Algebra	3–71	•	Integral Calculus and Differentia	
	1. Sets	3		Equations	210–248
	2. Relation	8		1. Indefinite Integrals	210
	3. Complex Numbers	13		2. Definite Integrals	223
	4. Arithmetic Progression	19		3. Differential Equations	233
	5. Geometric Progression	25		4. Problems on applications of	J
	6. Harmonic Progression	31		differential Equation growth and	
	7. Miscellaneous Series	35		Decay	246
	8. Permutations and Combinations	40	•	Vector Algebra	249–263
	9. Quadratic Equations	45	•	Statistics and Probability	264–273
	10. Binomial Theorem	50		Frequency Distribution, mean,	
	11. Binary Number System	57		median, mode and standard	26
	12. Representation of Real Numbers on			deviation	264
	a line	60		Graphical Representation	274–292
	13. Linear Inequations in two variables	64		1. Histogram, Frequency Polygon	
•	Matrices and Determinants	72–85		and Pie chart	274
•	Trigonometry 86	6-115		2. Correlation and Regression	281
	1. Identities and Trigonometric Ratios	86		3. Probability	284
	2. Simple Identities	95		GENERAL ENGLISH	
	3. Properties of Triangles	99			2 2
	4. Inverse Trigonometrical Functions	104	1.	Common Error	2–34
	5. Height and Distance	109		Articles, Nouns, Pronouns	2
•	Coordinate Geometry 110	6–155		 Adjectives, Adverbs, Adverbial 	order 8
	1. Rectangular cartesian coordinates			 Verb, Infinitive, Verbal noun, 	
	and straight lines	116		Gerund, Participle	13
	2. The Circle	121		 Conjunctions, Prepositions 	19
	3. The Parabola	125		 Miscellaneous Sentences 	24
	4. The Ellipse	130	2.	Antonyms	35–40
	5. The Hyperbola	135	3.	Synonyms	41–47
	6. Geometry of Three Dimensions	140			48–57
	7. The Plane	145	4. -	Sentence Completion	
	8. The Sphere	152	5.	One Word Substitution	58–61
•	Differential Calculus 150	5–209	6.	Comprehension	62–75
	1. Function	156	7.	Passage Completion	76–80
	2. Limit and Continuity	164	8.	Completion of Paragraphs and	
	3. Differentiation	182		Sentences	81–88

	GENERAL KNOWLEDG	E	10. Wave Motion	52-56
•	History and Culture	3–17	11. Electrostatics	57–64
	Indian Polity and Constitution	18–40	12. Current Electricity	65–69
•	Indian National Movement	41–54	13. Thermal and Chemical Effects	
	Geography	55–68	of Current	70–72
	Geography of India	55	14. Magnetic Effect of Current	73–76
	World Geography	63	15. Magnetism	77–79
•	Indian Economy	69–79	16. Electromagnetic Induction and	
•	International Organisation	80-81	Alternating Current	80-84
•	Books and Authors	82-85	17. Electromagnetic Waves	85–86
•	Awards	86–89	18. Ray Optics and Optical	
•	Sports	90-93	Instruments	87–95
•	Final Population Results–		19. Electrons and Photons	96–98
	Census of India 2011	94–96	20. Atoms, Molecule and Nuclei	99–102
•	Physics	1-140	21. Solids and Semiconductor	
	Measurement and Dimensional		Devices	103-105
	Analysis	3–7	22. Primary and Secondary Cells	106-113
	2. Rectilinear Motion	8-12	23. X-rays	114–116
	3. Motion in Two and Three		24. General Physics	117-139
	Dimensions	13–19	Chemistry	1-60
	4. Laws of Motion	20-26	General Chemistry	3
	5. Work, Energy and Power	27–31	Physical Chemistry	16
	6. Rotatory Motion of Rigid Body	32–35	Invision ChemistryInorganic Chemistry	28
	7. Gravitation	36–40		42
	8. Heat and Thermodynamics	41–47	Organic Chemistry	42
	9. Oscillations	48-51	General Science	1-16