12079 – Mathematics—Part I

Chapter	Page No.	Dropped Topics/Chapters
Chapter 1: Relations and Functions	12	1.4 Composition of Functions and Invertible Function (upto 'This leads to the following definition')
	13–14	Full Pages
	15	Examples 24 and 25
	16–25	Full Pages
	26	Ques. 12 and 13
	27–28	Examples 45 and 49
	29–31	Ques. 1–3, 6–7, 9, 11–14, 18–19
	31–32	Summary Points 11–13 and 15–19
Chapter 2: Inverse Trigonometric Functions	42–44	2.3 Properties of Inverse Trigonometric Functions (Except • $sin\left(sin^{-1}x\right)=x, x\in[-1,1]$ • $sin^{-1}(sin\,x)=x, x\in\left[-\frac{\pi}{2},\frac{\pi}{2}\right]$)
	45–47	Examples 4, 7 and 8; Alternative Solution of Example 5
	47–48	Ques. 3, 4, 6, 12, 14, 15
	49–51	Examples 10, 11, 12, 13
	51–52	Ques. 8, 12, 17 (Miscellaneous Exercise)
	53	Summary Points 8–13
Chapter 3: Matrices	90–92	3.7 Elementary Operations (Transformation) of a Matrix
	92–97	3.8.1 Inverse of Matrices by Elementary Operations (Retain Ques. 18 of Exercise 3.4)

	98	Example 26
	100–101	Ques. 1–3 and 12 (Miscellaneous Exercise)
	102	Third Last Point of Summary
Chapter 4: Determinants	109–121	4.3 Properties of Determinants
	137–143	Miscellaneous Examples 30–32 and 34 Ques. 2, 4–6, 11–15 and 17 (Miscellaneous Exercise)
	144	Summary Points 4–11
Chapter 5: Continuity and Differentiability	165–166	Examples 22 and 23
	168	Example 27
	184–186	5.8 Mean Value Theorem
	186–187	Exercise 5.8 and Miscellaneous Example 44 (ii)
	192–193	Ques. 19 (Miscellaneous Exercise) and Summary points 5 (derivatives of $cot^{-1}x$, $sec^{-1}x$, $cosec^{-1}x$), 7 and 8
Chapter 6: Application of Derivatives	206–216	6.4 Tangents and Normals 6.5 Approximations
	236–238	Examples 45, 46
	242–244	Ques. 1, 4–5 and 20–24 (Miscellaneous Exercise)
	245	Points 4–10 in the Summary
Answers	268–270 273–274 276 282–283 284–285	Answers of Exercises

12080 – Mathematics—Part II

Chapter	Page No.	Dropped Topics/Chapters
Chapter 7: Integrals	290–291	Points (xi)–(xiii) in the List of Derivatives
	291–292	7.2.1 Geometrical Interpretation of Indefinite Integral
	298–299	7.2.3 Comparison between Differentiation and Integration
	613–616	7.6.3 Type of Integral
	331–334	7.7.1 Definite Integral as the Limit of a Sum
	352–354	Ques. 19, 32, 40 and 44 Point 2 in the Summary
	355	(xiv) and (xv) in Some Standard Integrals
Chapter 8: Application of Integrals	363–365	8.2.1 The Area of the Region Bounded by a Curve and a Line
	366	Ques. 3 and 6–11 in Exercise 8.1
	366–372	8.3 Area between Two Curves
	373–376	Examples 11, 13 and 14 Ques. 2–3, 6–7, 8–15, 18–19 (Miscellaneous Exercise)
	377	Last Two Points of the Summary
Chapter 9: Differential Equations	385–391	9.4 Formation of Differential Equations whose General Solution is Given
	415–416	Example 25
	420–422	Ques. 3, 5 and 15 (Miscellaneous Exercise), Point Six of the Summary

Chapter 10: Vector Algebra	616–619 619–622	10.7 Scalar Triple Product 10.7.1 Coplanarity of Three Vectors
Chapter 11: Three Dimensional Geometry	465 469–471 477–478 479–497 497–499 500–501 502–503	11.2.1 Relation between the Direction Cosines of a Line 11.3.2 Equation of a Line Passing through Two Given Points, Ques. 8–9 (Exercise 11.2) 11.6 Plane 11.7 Coplanarity of Two Lines 11.8 Angle between Two Planes 11.9 Distance of a Point from a Line 11.10 Angle between a Line and a Plane Ques. 1, 2, 5, 7–8, 10–19, 21–23 (Miscellaneous Exercise) Summary Points 13, 20–24 Full Pages
Chapter 12: Linear Programming	514–527 528–529	12.3 Different Types of Linear Programming Problems Summary Points 2–9
Chapter 13: Probability	557–558 558–559 559–564	13.6 Random Variables and Its Probability Distributions Example 22 and 23 13.6.1 Probability Distribution of a Random Variable 13.6.2 Mean of Random Variables

	565–571 572–578 579–581 583 585–586	13.6.3 Variance of a Random Variable 13.7 Bernoulli Trials and Binomial Distribution Example 34 and 35 Ques. 5–7, 9–11 (Miscellaneous Exercise) Last 3 Points of the Summary
Answers	594 596–599 601 604–612	Answers of Exercises

12083 – Biology

Chapter	Page No.	Dropped Topics/Chapters
Chapter 1: Reproduction in Organisms	3–18	Full Chapter
Chapter 9: Strategies for Enhancement in Food Production	165–176 178	Full Chapter
Chapter 13: Organisms and Populations	220 221–222 223–225 225–226	13.1 Organism and Its Environment 13.1.1 Major Abiotic Factors 13.1.2 Responses to Abiotic Factors 13.1.3 Adaptations Summary (para 2) Ques. 1, 2, 3, 9, 10, 11, 12

Chapter 14: Ecosystem	250–252 253–254 254–255 255	14.6 Ecological Succession 14.6.1 Succession of Plants 14.7 Nutrient Cycling 14.7.1 Ecosystem – Carbon Cycle 14.7.2 Ecosystem – Phosphorus Cycle 14.8 Ecosystem Services
Chapter 16: Environmental Issues	270–286	Full Chapter

12085 – Chemistry—Part I

Chapter	Page No.	Dropped Topics/ Chapters
Unit 1: The Solid State	1–34	Full Chapter
Unit 5: Surface Chemistry	123–148	Full Chapter
Unit 6: General Principles and Processes of Isolation of Elements	149–169	Full Chapter
Unit 7: The *p*-Block Elements	170–214	Full Chapter

12086 – Chemistry—Part II

Chapter	Page No.	Dropped Topics/Chapters
Unit 15: Polymers	433–446	Full Chapter

Unit 16: Chemistry in Everyday Life	447–463	Full Chapter

12089 – Physics—Part I

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 1: Electric Charges and Fields	2–7	1.2 Electric Charge (delete only activity with paper strips and making electroscope)
		1.3 Conductors and Insulators (delete only concept of earthing)
		1.4 Charging by Induction
	47–50	Exercises 1.13, 1.25–1.34
Chapter 2: Electrostatic Potential and Capacitance	81	2.15 Energy Stored in a Capacitor (delete only derivation)
	87–92	Exercises 2.12 to 2.36
Chapter 3: Current Electricity	102–103	3.7 Resistivity of Various Materials (delete Tables 3.1 and 3.2 and Carbon resistors, Colour code for carbon resistor)
	107–109	3.10 Combinations of Resistors – Series and Parallel
	112–113	Example 3.5
	120–124	3.15 Meter Bridge
		3.16 Potentiometer
	127–131	Exercises 3.3, 3.4, 3.10, 3.12, 3.14–3.23

Chapter 4: Moving Charges and Magnetism	135	Table 4.1
	140–142	4.4.1 Velocity Selector
		4.4.2 Cyclotron
	152–153	4.8.2 The Toroid
	162–163	4.10.3 The Magnetic Dipole Moment of a Revolving Electron
	170–172	Exercises 4.14–4.28
Chapter 5: Magnetism and Matter	176–179	5.2.2 Bar Magnet as an Equivalent Solenoid (delete only mathematical treatment)
		5.2.3 The Dipole in a Uniform Magnetic Field (delete only mathematical treatment)
	180	Example 5.4
	185–189	5.4 Earth's Magnetism
		5.41. Magnetic Declination and Dip
	191	Table 5.2
	194–196	5.6.2 Paramagnetism (delete only Curie's Law)
		5.6.3 Ferromagnetism (delete only Curie's temperature; and Hysteresis)
		5.7 Permanent Magnets and Electromagnets
	200–203	Exercises 5.1, 5.2, 5.9–5.11, 5.13–5.25
Chapter 6: Electromagnetic Induction	215–219	6.7 Energy Consideration: A Quantitative Study
		6.8 Eddy Currents
	230–232	Exercises 6.6, 6.10–6.17

Chapter 7: Alternating Current	240	Figure 7.7 Magnetisation and Demagnetisation of an Inductor
	243	Figure 7.10 Charging and Discharging of a Capacitor
	246–247	7.6.2 Analytical Solution (of series LCR circuit)
	249–251	7.6.3 Resonance (delete only Sharpness of Resonance)
	255–259	7.8 LC Oscillations
	266–268	Exercises 7.6, 7.8, 7.10, 7.12–7.26
Chapter 8: Electromagnetic Waves	273–274	Example 8.1
	276–278	8.3.2 Nature of Electromagnetic Waves (delete only about ether and page 277)
	279–280	Example 8.4 and 8.5
	287	Exercises 8.11–8.15

12090 – Physics—Part II

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 9: Ray Optics and Optical Instruments	318	9.3 Refraction (delete only advanced sunrise and delayed sunset)
	321–322	9.4.1(i) Mirage
		9.4.1(ii) Diamond
	332–335	9.7 Some Natural Phenomena due to Sunlight
		9.7.1 The Rainbow
		9.7.2 Scattering of Light
	346	Exercise 9.18

Chapter 10: Wave Optics	358–359	10.3.4 Doppler Effect
	359	Example 10.1
	363–367	10.5 Interference of Light Waves and Young's Experiment (retain the final expressions for dark and bright fringes but delete the derivation; delete expression for fringe width)
	368–371	10.6 Diffraction (retain only qualitative treatment)
	372–376	10.6.3 Resolving Power of Optical Instruments
		10.6.4 Validity of Ray Optics
	379–381	10.7.1 Polarisation by Scattering
		10.7.2 Polarisation by Reflection
	383–385	Exercises 10.7–10.21
Chapter 11: Dual Nature of Radiation and Matter	388	Table 11.1
	397	Example 11.3
	400–404	11.8 Wave Nature of Matter (delete only derivation for de Broglie wavelength of accelerated electron; and Heisenberg's uncertainty principle)
		11.9 Davisson and Germer Experiment
		Appendix 11.1 The History of Wave-Particle Flip-Flop
	407–413	Exercises 11.5, 11.7, 11.12 to 11.14, 11.16, 11.17, 11.19–11.37

Chapter 12: Atoms	421–422 424–426 429 430 436–437	12.3.1 Spectral Series 12.4 Bohr Model of the Hydrogen Atom (retain only the expression for radius of nth possible orbit but delete its derivation) 12.5 The Line Spectra of the Hydrogen Atom (retain only qualitative treatment) Example 12.6 Exercises 12.3, 12.11–12.17
Chapter 13: Nuclei	446–451 452–455 462–466	13.6.1 Law of Radioactive Decay 13.6.2 Alpha Decay 13.6.3 Beta Decay 13.6.4 Gamma Decay 13.7.2 Nuclear Reactor Exercises 13.1, 13.2, 13.6–13.10, 13.12–13.14, 13.18, 13.22–13.31
Chapter 14: Semiconductor Electronics: Material Devices and Simple Circuits	485–495 497–499	14.8 Special Purpose *p-n* junction Diodes 14.9 Digital Electronics and Logic Gates Exercises 14.7–14.15

12130 – Computer Science

No Changes

12103 – Introductory Microeconomics

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 6: Non-Competitive Markets	88–101	Full Chapter

12105 – Introductory Macroeconomics

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 6: Open Economy Macroeconomics	95–98	Box 6.2 Exchange Rate Management—International Experience

12113 – Business Studies—I

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 3: Business Environment	87–88 91–92	Impact of Government Policy Changes on Business and Industry, with Special Reference to Adoption of the Policies of Liberalisation, Privatisation and Globalisation
Chapter 7: Directing	188–190 204	Qualities of a Good Leader
Chapter 8: Controlling	214–221 223	Techniques of Controlling

12114 – Business Studies—II

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 10: Financial Market	252–275	Full Chapter

12117 – Accountancy—Not-for-Profit Organisation and Partnership Accounts

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 1: Accounting for Not-for-Profit Organisation	1–60	Full Chapter

12127 – Accountancy—Computer Accounting System

Chapter	Page No.	Dropped Topics/ Chapters
Chapter 5: Database Management System for Accounting	125–150	Full Chapter

12128 – Accountancy—Company Accounts and Analysis of Financial Statements

No Changes

12149 – Informatics Practices

No Changes