COMPUTER SCIENCE — CLASS 12

Paper Pairing Scheme & Exam Strategy 2026

AJK (Mirpur) Board | Federal Board (FBISE) | Total Marks: 75

PAPER PATTERN — TOTAL MARKS: 75

Section	Type	Total Qs	Attempt	Marks Each	Total Marks
Section A	MCQs (Objective)	13	13 (All)	1	13
Section B	Short Questions	28	14	3	42
Section C	Long Questions	8	4	5	20
				Grand Total	**75**

CHAPTER-WISE SLO DISTRIBUTION (Short · Long · Objective)

Ch#	Chapter Title	Short Qs	Long Q	MCQs	Key Focus
Ch 1	Computer System	6	1 (5 mk)	2	Highest SQ count (6) — hardware, software, OS, memory, networks
Ch 2	Computational Thinking & Algorithms	5	1 (5 mk)	2	Flowcharts, pseudocode, algorithm design, problem solving
Ch 3	Programming Fundamentals (Python / OOP)	1–2	1 (5 mk)	0	At least one program-based LQ expected; OOP concepts
Ch 4	Data & Analysis	5	1 (5 mk)	2	Data types, databases, spreadsheets, data analysis techniques
Ch 5	Applications of Computer Science	3	1 (5 mk)	2	AI, ML basics, automation, robotics, real-world CS applications
Ch 6	Impacts of Computing	4	1 (5 mk)	1	Social, ethical, legal, environmental impacts of technology
Ch 7	Digital Literacy	3	1 (5 mk)	2	Internet safety, cybersecurity, digital citizenship, media literacy
Ch 8	Entrepreneurship	0	1 (5 mk)	1	No short questions — Long Q only; startup basics, e-commerce
Total		**27–28**	**8 opts**	**13**	

■ *Blue = HIGH priority (Long + Short Qs)*

■ *Green = Programming (program-based LQ expected)*

■ *Amber = Ch 8 — Long Q only (no Short Qs)*

Programming (Ch 3) Important Note: The current scheme shows only 1–2 short questions for the Python/OOP chapter. However, the instructor warns that the board may increase these by drawing "loan" questions from earlier chapters. Expect **at least one program-based long question** from Ch 3. Prepare: functions, loops, conditionals, OOP concepts (classes, objects, inheritance).

LONG QUESTION PAIRINGS (Section C — Attempt 4 of 8)

Pair	Chapters	Topics to Prepare	Marks
Pair 1	Ch 1 + Ch 8	Ch 1 (Computer System): Hardware components, OS functions, memory hierarchy, input/output devices, network types and topologies Ch 8 (Entrepreneurship): Startup concepts, e-commerce models, digital marketing, business plan basics	5 + 5
Pair 2	Ch 4 + Ch 6	Ch 4 (Data & Analysis): Database concepts, data types, spreadsheet functions, data representation, information vs data Ch 6 (Impacts of Computing): Social impact, ethical issues, cybercrime, digital divide, environmental effects of computing	5 + 5
Pair 3	Ch 5 + Ch 7	Ch 5 (Applications): AI and ML concepts, automation, robotics, simulation, emerging technologies Ch 7 (Digital Literacy): Cybersecurity threats and defences, internet safety, digital citizenship, information verification	5 + 5
Pair 4	Ch 2 + Ch 3	Ch 2 (Algorithms): Flowcharts, pseudocode, algorithm analysis, sorting and searching algorithms Ch 3 (Programming/OOP): Python programs — loops, functions, OOP; classes, objects, inheritance, encapsulation	5 + 5

★ *All 4 pairs contain at least one chapter from the recommended focus group (Ch 1–5). Master Ch 1–5 first before Ch 6–8.*

HIGH-YIELD SHORT QUESTION CHAPTERS (Section B)

Chapter	Short Qs	Key Short Q Topics
Ch 1 — Computer System	6 (highest)	Hardware vs software; OS types and functions; RAM vs ROM; input/output devices; network topologies; secondary storage
Ch 2 — Algorithms	5	Flowchart symbols and drawing; pseudocode syntax; algorithm efficiency; binary search; bubble sort steps
Ch 4 — Data & Analysis	5	Data vs information; database terminology (table, record, field); data types; spreadsheet formulas; data validation
Ch 6 — Impacts of Computing	4	Types of cybercrime; digital divide; ethical issues in AI; e-waste and environmental impact
Ch 5 — Applications of CS	3	AI definition and applications; machine learning types; robotics uses; simulation advantages

Ch 7 — Digital Literacy	3	Types of malware; safe password practices; phishing attacks; digital footprint
Ch 3 — Programming	1–2	Python data types; OOP definitions (class, object, method); loop types; function definition syntax
Ch 8 — Entrepreneurship	0	No short questions — Long Q only
Total	**27–28 Qs**	

MCQ STRATEGY (Section A — 13 Marks)

MCQ Weight	Chapters	Action
2 MCQs each	Ch 1, Ch 2, Ch 4, Ch 5, Ch 7	Revise all textbook exercise MCQs; definitions and key terms
1 MCQ each	Ch 6, Ch 8	Chapter-end exercise questions for each
0 MCQs	Ch 3 (Programming/Python)	Focus effort on sections with MCQ weight; Ch 3 marks are entirely in Short and Long Qs

FINAL PREPARATION PRIORITY LIST

Rank	Task	Chapter(s)	What to Prepare
1st	Computer System — Short Qs + Long Q	Ch 1	6 short Qs + 1 Long Q — highest SQ count; hardware, OS, memory, networks, topologies
2nd	Algorithms — Short Qs + Long Q	Ch 2	5 short Qs + 1 Long Q — flowcharts, pseudocode, sorting/searching algorithms
3rd	Data & Analysis — Short Qs + Long Q	Ch 4	5 short Qs + 1 Long Q — database, data types, spreadsheets, data representation
4th	Programming / OOP — Long Q + Program	Ch 3	0 MCQs but carries Long Q — prepare Python programs (loops, functions, OOP); at least one program-based question expected
5th	Applications of CS — Short Qs + Long Q	Ch 5	3 short Qs + 1 Long Q + 2 MCQs — AI/ML, automation, robotics, simulation
6th	Impacts of Computing — Short Qs	Ch 6	4 short Qs + 1 Long Q — cybercrime, ethical issues, digital divide, e-waste
7th	Digital Literacy — Short Qs + Long Q	Ch 7	3 short Qs + 1 Long Q + 2 MCQs — cybersecurity, malware, digital citizenship
8th	Entrepreneurship — Long Q only	Ch 8	0 short Qs but 1 Long Q — startup concepts, e-commerce, digital marketing; paired with Ch 1 in Long Qs
9th	MCQ Revision — All Chapters	All (ex. Ch 3)	Every chapter-end exercise MCQ; Ch 1, 2, 4, 5, 7 carry 2 MCQs each

QUICK REVISION CARD

Section	Best Chapters	Skip / Low Priority
Short Qs (B)	Ch 1 (6) ★★, Ch 2 (5), Ch 4 (5), Ch 6 (4), Ch 5 (3), Ch 7 (3)	Ch 8 = 0 Short Qs; Ch 3 = 1–2 only
Long Qs (C)	Pair 1: Ch1+8 | Pair 2: Ch4+6 | Pair 3: Ch5+7 | Pair 4: Ch2+3	All 8 chapters have Long Q options
MCQs (A)	Ch 1, 2, 4, 5, 7 = 2 MCQs each; Ch 6, 8 = 1 each	Ch 3 = 0 MCQs
Programming	Ch 3: Expect 1 program-based LQ — loops, functions, OOP	No MCQs; 1–2 Short Qs only
Focus 5	Ch 1, 2, 3, 4, 5 — mastering these covers majority of the paper	Ch 6, 7, 8 as backup after Ch 1–5