COMPUTER SCIENCE — CLASS 9

Complete Exam Strategy 2026

Federal Board (FBISE) | Total Marks: 55 | 100% Paper Coverage

PAPER PATTERN — TOTAL MARKS: 55

Section	Type	Total Qs	Attempt	Marks Each	Total Marks
Section A	MCQs (Objective)	12	12 (All)	1	12
Section B	Short Questions	~18	9	3	27
Section C	Long Questions	6	4	4	16
				Grand Total	**55**

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

Ch.	Chapter Name	Short Qs	Long Qs	MCQs	Strategy Note
Ch 1	Computer System	5	1	1	Highest SQ count (5); Network Topologies + OSI Model = MOST IMPORTANT
Ch 2	Computational Thinking	3	1	2	Flowcharts (Sum/Product/Average, Largest of 3) + Problem-solving steps
Ch 3	Programming Fundamentals (JavaScript)	4	1	3	HIGH RISK — JavaScript; 3 MCQs (highest); HTML tags + basic JS programs
Ch 4	Big Data & Analysis	3	1	2	Big Data characteristics (5 Vs) — "Star" question; Data types/structures
Ch 5	Applications of CS (AI)	2	1	1	AI vs ML + Cloud Computing — HIGH PRIORITY; paired with Ch 1
Ch 6	Impacts of Computing	2	1	2	Social networking; computing innovations; can skip LQ if Ch 1–5 mastered
Ch 7	Entrepreneurship	1	0	1	SAFE TO SKIP — 1 Short Q + 1 MCQ only; no Long Q
Total		**20**	**6 opts**	**12**	

■ *Green = HIGH priority (Long + Short Qs)* ■ *Blue = Computational / Algorithmic focus* ■ *Red = HIGH RISK (JavaScript programming)* ■ *Grey = Safe to skip*

The "Safety" Strategy — Score 100% Without Programming: Master Chapters 1, 2, 4, and 5 completely. These four chapters provide enough Long Q options and Short Qs to secure full marks even if Chapter 3 (JavaScript) is challenging. Chapter 3 is high-risk due to JavaScript syntax — attempt it only if you have prepared the code thoroughly.

LONG QUESTION PAIRINGS (Section C — Attempt 4 of 6)

Pair	Chapters	Key Long Q Topics	Risk Level
Pair 1	Ch 1 + Ch 5	Ch 1: Network Topologies (Star, Ring, Bus, Mesh — draw + compare); OSI Model — 7 layers, functions, mnemonics (THE MOST IMPORTANT LQ); Natural vs Artificial Systems; Network Components Ch 5: AI vs Machine Learning — definitions, differences, examples; Cloud Computing — types (IaaS, PaaS, SaaS), advantages	**LOW — Safest pair**
Pair 2	Ch 2 + Ch 3	Ch 2: Problem-solving steps; Flowcharts — practice: • Sum, Product & Average of two numbers • Largest of Three Numbers (with if/else logic) • Area of Triangle and Rectangle Ch 3: HTML tags (heading, paragraph, image, link, table, list); Basic JavaScript programs from textbook exercises; variables, data types, conditional statements	**MEDIUM-HIGH (JS is risky)**
Pair 3	Ch 4 + Ch 6	Ch 4: Big Data characteristics — the 5 Vs (Volume, Velocity, Variety, Veracity, Value) ★ "Star" question; Data types and data structures; data analysis process Ch 6: Social networking — advantages and disadvantages; Computing innovations and their impacts; ethical and legal issues in computing	**LOW-MEDIUM (skip Ch 6 LQ if needed)**

★ OSI Model (Ch 1) is flagged as the MOST IMPORTANT long question — prepare all 7 layers with functions.

CHAPTER-SPECIFIC KEY TOPICS — TARGETED PREPARATION

Chapter	Long Q Must-Prepare	Short Q / Flowchart Focus
Ch 1 Computer System	1. Natural vs Artificial Systems — differences with examples 2. Network Components — sender, receiver, medium, protocol, message 3. Network Topologies — Star, Ring, Bus, Mesh (draw + compare) 4. OSI Model — all 7 layers, functions ★ (MOST IMPORTANT)	Short Qs from instructor notes Hardware/software definitions Types of networks (LAN, WAN, MAN)
Ch 2 Computational Thinking	Problem-solving steps (decomposition, pattern recognition, abstraction, algorithm design) Flowchart practice (MUST DRAW): • Sum, Product & Average of 2 numbers • Largest of Three Numbers • Area of Triangle / Rectangle	Flowchart symbols — know each shape Algorithm vs Pseudocode Computational thinking components

Ch 3 Programming (JavaScript)	HTML tags — heading (h1–h6), paragraph (p), image (img), hyperlink (a), table, ordered/unordered list Basic JavaScript programs from textbook: • Variables and data types • if/else conditional statements • Simple loops and functions	3 MCQs from this chapter — revise all HTML structure (DOCTYPE, head, body) JS syntax: var, let, const
Ch 4 Big Data & Analysis	Big Data — the 5 Vs: Volume, Velocity, Variety, Veracity, Value ★ Data types (structured, semi-structured, unstructured) Data structures — arrays, lists Data analysis process steps	Database vs Big Data difference Big Data tools (Hadoop, Spark — brief) Data lifecycle
Ch 5 Applications (AI)	AI vs Machine Learning — definitions, key differences, examples of each ★ HIGH PRIORITY Cloud Computing: • Types: IaaS, PaaS, SaaS • Advantages and limitations	Types of AI (narrow, general, super) Real-world AI applications IoT definition and examples
Ch 6 Impacts	Social networking — advantages and disadvantages Computing innovations and societal impacts Ethical issues: privacy, cyberbullying, digital divide	Can skip Long Q if Ch 1–5 fully prepared 2 MCQs — revise bold terms

FINAL PREPARATION PRIORITY LIST

Rank	Task	Chapter	What to Prepare
1st	OSI Model + Network Topologies	Ch 1	OSI Model — all 7 layers + functions (most important LQ); Topologies — draw Star, Ring, Bus, Mesh with advantages/disadvantages
2nd	Short Qs — Computer System (5 SQs)	Ch 1	Natural vs Artificial Systems; Network Components; 5 short questions — highest SQ chapter; use instructor notes
3rd	AI vs ML + Cloud Computing	Ch 5	AI vs Machine Learning definitions and differences ★; Cloud Computing types (IaaS, PaaS, SaaS) and advantages
4th	Big Data 5 Vs + Data Types	Ch 4	The 5 Vs of Big Data ★ (star question); data types (structured/unstructured); data structures; analysis process
5th	Flowcharts — Practice Drawing	Ch 2	Sum/Product/Average of 2 numbers; Largest of 3 numbers; Area of Triangle/Rectangle — draw and label with correct symbols
6th	Short Qs — Programming (4 SQs)	Ch 3	HTML tags (all types); JavaScript syntax basics; 3 MCQs — revise all textbook exercises and bold terms
7th	JS Programs (if comfortable)	Ch 3	Only attempt if JavaScript is prepared — variables, conditionals, loops; if not, rely on Ch 1+2+4+5 for Long Qs (safety strategy)

8th	Impacts + Social Networking	Ch 6	Social networking advantages/disadvantages; computing innovations; can skip Long Q from Ch 6 if Ch 1–5 fully prepared
9th	MCQ Revision + Ch 7	All + Ch 7	All chapter-end exercise MCQs + bold terms; Ch 7 (Entrepreneurship) — 1 Short Q + 1 MCQ only; minimal effort needed

QUICK REVISION CARD

Short Qs (B)	Ch 1 (5) ★★, Ch 3 (4), Ch 2 (3), Ch 4 (3)	Ch 7 (1 SQ only) — minimal effort
Long Qs (C) (4 of 6)	Safest: Ch 1 + Ch 5 (Pair 1) & Ch 4 + Ch 6 (Pair 3) Risky: Ch 2 + Ch 3 (Pair 2 — JS programming)	Ch 6 LQ can be skipped if Ch 1–5 mastered Ch 7 has no Long Q
MCQs (A)	Ch 3 (3 MCQs ★), Ch 2/4/6 (2 each), Ch 1/5/7 (1 each)	Revise bold terms + chapter-end exercises
MUST topics	OSI Model 7 layers ★ | Big Data 5 Vs ★ | AI vs ML ★ | Network Topologies (draw) | Flowcharts (draw)	All flagged by instructor as guaranteed
Safety Plan	Ch 1 + Ch 2 + Ch 4 + Ch 5 = 100% score without needing JavaScript	Add Ch 3 only if JS is prepared