**COMPUTER SCIENCE**

For Class IX (marks 55)

**1. Introduction to Computers**

* History and development of computers
	+ Types of computers (analogue, digital, hybrid)
	+ Classification of digital computers (micro, mini, mainframe and super computer)
* Impact of computers and the internet on society
* Introduction to programming languages (high level, medium level and low level) concepts of compiler, interpreter and assembler.

**2. Computer Components**

* Central Processing Unit (CPU),
	+ Control Unit (CU),

 Arithmetic and Logic Unit (ALU)

* Busses: Data bus, Address bus, Control bus
	+ Primary/Main memory (RAM, ROM) Secondary memory,
	+ Input/output devices,
	+ Ports: serial and parallel ports
	+ Motherboard

**3. Input/Output Devices**

* Input devices:
	+ Key board, mouse, joystick, scanner, trackball, light pen, voice microphone, digital video camera, disk drive
		- Output devices:

- Monitors, printers and their kinds (daisy wheel, line, electrostatic, inkjet, electro thermal and laser), plotters, CD writer, disk drive (concept of soft copy and hard copy)

**4. Storage Devices**

* + - * + Main memory:

RAM, ROM, SIMM, DIMM

Memory units:

Bits, byte (K bytes, M bytes, G bytes and T bytes).

Secondary memory;

Floppy disk, hard disk, compact disk, magnetic tape.

**5. Computer Software**

* Types of software:
	+ System software (operating system, programming language translator, service software and examples),
	+ Application software,
		- DOS Commands:
			* Executable Files, EXE, COM and BAT,
			* DIR with Switches, CLS, DATE, TIME, COPY, VER, DEL, TYPE, FORMAT, COPY PRINT, SYS, CHKDSK, EDIT, XCOPY, DELTREE, PROMPT, REM,
				+ Create or make directory,
				+ Remove/Delete command, and other commonly used commands,
				+ Paths.

**6. Introduction to WINDOWS**

* Startup process of WINDOWS,
* Components of WINDOWS:
* Title bar,
* Status bar,
* Scroll bars,
* Menu bar,
* Dialog boxes,
* Familiarization with WINDOWS icons:
	+ My Computer,
	+ Recycle Bin,
	+ Start Button,
	+ Control Panel,
	+ Other sub menus,
	+ Clicking the start button, beginning with taskbar,
	+ Shut down process,
		- Demonstration of installation procedure for WINDOWS,
		- Viruses and anti-virus.

**7. Computer Application (Word Processor)**

* Introduction to word processing,
* Loading a word processing program (MS WORD):
	+ Typing, saving, exiting,
	+ Text formatting,
	+ Document formatting,
	+ Blocking, moving blocks of text,
	+ Indenting,
	+ Fonts, page layout, printing.

**RECOMMENDED REFERENCE BOOKS FOR CLASS IX**

 The question paper will be syllabus oriented. However, the following books are recommended for reference and supplementary reading:

 1. Computer Science

 National Book Foundation, Islamabad

 2. Computer Science

 Punjab Text Book Board, Lahore

 3. Computer Science

 NWFP Textbook Board, Peshawar

 4. Computer Science

 Baluchistan Textbook Board, Quetta

 5. A Textbook of Computer Science for class IX-X

 Prof. Shaukat Ayub Burki

 Gaba Educational Book

 Urdu Bazaar, M.A. Jinnah Road, Karachi