**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