Subject V: Computer Awareness

Target Score: 100% Accuracy (High Return on Investment).
Syllabus Focus: MS Office (Word, Excel), Internet Basics, Hardware/Software, and Abbreviations.

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1. Computer Fundamentals (Hardware & Software)

Strategic Note: Understand the difference between Input and Output devices.

1.1 Hardware Components

- **Input Devices:** Devices used to give data to the computer.
  - *Examples:* Keyboard, Mouse, Scanner, Microphone, Joystick (for gaming), Barcode Reader.
- **Output Devices:** Devices that show the result.
  - *Examples:* Monitor (VDU), Printer, Speaker, Plotter, Projector.
- **CPU (Central Processing Unit):** The "Brain" of the computer.
  - **ALU (Arithmetic Logic Unit):** Performs math and logic operations.
  - **CU (Control Unit):** Manages the flow of data.
- **Memory:**
  - **RAM (Random Access Memory):** Volatile (Data is lost when power goes off). Temporary storage.
  - **ROM (Read Only Memory):** Non-volatile (Data remains even without power). Stores startup instructions (BIOS).
  - **Bit vs. Byte:**
    - 8 Bits = 1 Byte.
    - 1024 Bytes = 1 Kilobyte (KB).
    - 1024 KB = 1 Megabyte (MB).
    - 1024 MB = 1 Gigabyte (GB).
    - 1024 GB = 1 Terabyte (TB).

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2. Microsoft Office (High Priority for Exams)

Strategic Note: Most questions come from Shortcuts and Excel Formulas.

2.1 Microsoft Word (Word Processing)

- **File Extension:** .docx
- **Key Shortcuts (Memorize These):**
  - **Ctrl + N:** New Document.
  - **Ctrl + O:** Open an existing document.

- ○ **Ctrl + S:** Save.
- ○ **Ctrl + P:** Print.
- ○ **Ctrl + A:** Select All text.
- ○ **Ctrl + X:** Cut.
- ○ **Ctrl + C:** Copy.
- ○ **Ctrl + V:** Paste.
- ○ **Ctrl + Z:** Undo (Go back one step).
- ○ **Ctrl + Y:** Redo (Repeat the undone step).
- ○ **Ctrl + B:** **Bold**.
- ○ **Ctrl + I:** *Italic*.
- ○ **Ctrl + U:** Underline.
- ○ **Ctrl + F:** Find text.
- ○ **Ctrl + H:** Find and Replace.

2.2 Microsoft Excel (Spreadsheet)

- ● **File Extension:**.xlsx
- ● **Structure:**
  - ○ **Rows:** Horizontal (Numbered 1, 2, 3...).
  - ○ **Columns:** Vertical (Lettered A, B, C...).
  - ○ **Cell:** Intersection of a Row and Column (e.g., A1).
- ● **Functions:**
  - ○ **=SUM(A1:A5):** Adds numbers from A1 to A5.
  - ○ **=AVERAGE(A1:A5):** Calculates average.
  - ○ **=MAX():** Finds largest number.
- ● **Excel Shortcuts:**
  - ○ **F2:** Edit the selected cell.
  - ○ **Shift + Space:** Select entire row.
  - ○ **Ctrl + Space:** Select entire column.

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3. Internet & Networking

Strategic Note: Focus on email protocols and web terminology.

3.1 Internet Terms

- ● **URL (Uniform Resource Locator):** The address of a website (e.g., www.google.com).
- ● **WWW:** World Wide Web.
- ● **Browser:** Software to access the internet (Google Chrome, Mozilla Firefox, Microsoft Edge). *Note: Google is a Search Engine; Chrome is a Browser*.
- ● **IP Address:** A unique numerical label assigned to each device (e.g., 192.168.1.1).

3.2 Email Basics

- **To:** Main recipient.
- **CC (Carbon Copy):** Sends a copy to others; everyone can see who received it.
- **BCC (Blind Carbon Copy):** Sends a copy, but **hides** the recipient's name from others.
- **Spam:** Unwanted/Junk emails.

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4. Important Abbreviations (Cheat Sheet)

Questions often ask: "What does 'S' stand for in 'HTTP'?"

Abbreviation	Full Form
CPU	Central Processing Unit
HTTP	HyperText Transfer Protocol
HTML	HyperText Markup Language
LAN	Local Area Network
WAN	Wide Area Network
Wi-Fi	Wireless Fidelity
USB	Universal Serial Bus
PDF	Portable Document Format
VIRUS	Vital Information Resources Under Siege
GUI	Graphical User Interface
OS	Operating System (e.g., Windows, Linux, Android)
ISP	Internet Service Provider