

Answer Key and Explanations

No.	Answer	Explanation of incorrect options
1	B	A, C, and D are output/input peripherals; CPU processes instructions.
2	A	B, C, and D are not the standard expansion of CPU.
3	C	A, B, and D produce output; keyboard supplies input.
4	B	A scans, C displays, and D controls movement; printer produces paper output.
5	B	ROM, hard disk, and CD-ROM retain data; RAM is volatile.
6	B	Four bits form a nibble; 16 bits form two bytes.
7	B	Decimal uses 0–9, octal uses 0–7, and hexadecimal uses 0–9 and A–F.
8	B	$1010_2 = 8 + 2 = 10$, not 8, 12, or 14.
9	B	MS Word, Calculator, and Paint are application programs.
10	C	Windows, Linux, and BIOS are system-level software.
11	B	RAM, cache, and registers are normally temporary or volatile; ROM is non-volatile.
12	B	CU controls operations; ALU performs arithmetic and logical operations.
13	A	The other expansions are incorrect.
14	A	A printer produces paper output; speakers produce sound and a plotter produces drawings.
15	A	SSD uses flash memory; the other listed devices use mechanical or magnetic methods.
16	D	Oracle is mainly a database-management product; the others are operating systems.
17	B	A byte contains 8 bits; a nibble contains 4 bits.
18	B	A byte has 8 bits and a word may contain several bytes.
19	A	Keyboard, mouse, and microphone are input devices.
20	A	Second-generation computers used transistors; later generations used ICs and microprocessors.
21	A	The operating system manages hardware, software, memory, files, and processes.
22	A	Linux is open-source; Windows and iOS are proprietary operating systems.
23	B	Formatting prepares storage; debugging finds errors; scanning reads documents.
24	A	The other expansions are not the standard meaning of GUI.
25	B	Ctrl+X cuts, Ctrl+V pastes, and Ctrl+Z undoes.
26	B	Ctrl+P prints, Ctrl+A selects all, and Ctrl+S saves.
27	A	Ctrl+D, Ctrl+F, and Ctrl+H have other functions such as bookmark, find, and replace.
28	A	Ctrl+E, Ctrl+L, and Ctrl+T are used for other commands in many applications.

29	B	Ctrl+Y generally repeats or redoes; the other shortcuts do not normally undo.
30	A	Folders organize files; they do not alter hardware.
31	B	F1 opens help, F5 refreshes, and F12 has application-specific functions.
32	C	F2 renames files; F4 and F7 have different functions.
33	A	A process is an executing program, not a physical component.
34	A	Multitasking concerns several running tasks, not keyboards or printers.
35	A	Android is a mobile operating system; DOS and Windows 98 are older desktop systems.
36	A	Word is designed mainly for creating and editing text documents.
37	A	Excel supports worksheets, formulas, charts, and calculations.
38	A	PowerPoint creates slide-based presentations.
39	B	A cell is formed where a row and column intersect.
40	C	Excel formulas begin with an equals sign; the other symbols have different uses.
41	B	COUNT counts values; TEXT and LEFT manipulate text.
42	C	Excel uses AVERAGE; AVG and MEAN are not the standard function name.
43	A	A workbook contains one or more worksheets.
44	A	Mail Merge combines a document with a recipient data source.
45	D	Justify aligns text with both margins; the other options align on one side or center.
46	A	Slide Sorter is designed for arranging and reordering slides.
47	B	F5 starts the slideshow; the other keys have different functions.
48	C	.docx is used for Word, .xlsx for Excel, and .pptx for PowerPoint.
49	B	.xlsx is the modern Excel format.
50	A	Format Painter copies formatting, not text or document history.
51	A	WAN covers large areas; PAN is personal-area networking.
52	B	LAN covers a small area; WAN covers cities, countries, or larger regions.
53	A	The Internet links many networks worldwide; it is not one individual computer.
54	A	A router connects networks; the other devices are peripherals.
55	A	A switch forwards local-network data to the intended port.
56	A	IP addresses identify network interfaces or devices; they do not control display size.
57	A	HTTP supports web communication; it does not format disks or create spreadsheets.
58	A	HTTPS uses encryption through TLS; it still works through the Internet and may use cookies.
59	A	DNS resolves domain names such as example.com to IP addresses.

60	A	Chrome is a browser; Drive is cloud storage and Windows is an operating system.
61	A	SMTP sends email; FTP transfers files.
62	A	FTP is designed for file transfer; SMTP is for sending email.
63	A	Wi-Fi provides wireless network connectivity.
64	A	Bluetooth is intended mainly for short-range device communication.
65	A	In a star topology, each device connects to a central hub or switch.
66	A	Malware means malicious software; the other expansions are incorrect.
67	A	A virus may replicate and modify or damage files; it does not improve speed.
68	A	Phishing uses fake messages or websites to obtain information.
69	B	Names, birthdays, and common words are easy to guess.
70	A	Two-factor authentication adds another proof of identity, such as a code or biometric.
71	A	A firewall filters network traffic; it does not clean screens or create presentations.
72	A	Ransomware commonly encrypts data and demands money for decryption.
73	C	Suspicious attachments may contain malware; verification is safer than opening or forwarding them.
74	A	Ciphertext is encrypted, unreadable data; plain text is the readable original.
75	A	A backup is an additional copy used for recovery.
76	A	An algorithm is a finite sequence of steps for solving a problem.
77	A	Flowcharts use symbols such as rectangles, diamonds, and arrows.
78	B	A diamond represents a decision; a rectangle usually represents a process.
79	A	Variables hold data values; they are not networking or printing devices.
80	A	Python is a programming language; Windows is an operating system.
81	B	Boolean values are True or False; integers and floats store numbers.
82	A	Loops repeat instructions; they do not necessarily shut down or connect devices.
83	B	Python uses # for a single-line comment; // is common in languages such as C++ and Java.
84	B	A stack removes the last inserted item first; a queue follows FIFO.
85	A	LIFO means Last In, First Out.
86	B	A queue removes the earliest inserted item first.
87	A	FIFO means First In, First Out.
88	A	OOP means Object-Oriented Programming; the other expansions are incorrect.
89	A	Encapsulation combines data and methods while restricting direct internal access.

90	A	A compiler translates source code into machine or intermediate code; it does not translate hardware.
91	A	DBMS means Database Management System.
92	A	A database stores organized, related data for access and management.
93	A	Relational databases organize data into tables made of rows and columns.
94	A	A primary key uniquely identifies each record; it does not control networking.
95	A	SQL is used to create, retrieve, update, and manage relational data.
96	A	HTML defines the structure and content of a webpage.
97	A	CSS controls appearance, layout, colors, fonts, and spacing.
98	A	A smart board supports visual and interactive instruction; it does not replace teachers.
99	A	Formative assessment occurs during instruction to improve learning.
100	A	Technology should support learning objectives; it should not replace meaningful teaching or be used unnecessarily.