Computer Science

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HISTORY OF COMPUTER

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History of Computer

Introduction to Computers:

The word 'computer' originally referred to people who performed mathematical calculations. Before modern computers existed, these human 'computers' were employed to carry out complex arithmetic operations, often used in fields like astronomy, engineering, and navigation. This practice dates back to at least the 17th century.

The first recorded use of the word 'computer' in English was in 1613, describing a person who computes. Over the centuries, as technology progressed, mechanical and electronic devices took over the computational role. This evolution marked the transition from manual computing to the automated systems we rely on today.

Understanding the history of computing helps us appreciate the innovations and challenges faced by early scientists and inventors who laid the foundation for today's digital age.

The Mechanical Era (1600–1900)

During the Mechanical Era, inventors developed physical devices to assist in computation. These devices worked without electricity and were typically operated by hand.

Tally Sticks

Tally sticks were simple tools used since ancient times to record numbers, debts, or messages. They were not calculators but rather record-keeping aids. A notch on a stick represented a unit of value or count. These were used extensively in medieval Europe, especially for tax collection.

Abacus (c. 2400 BC)

The abacus is one of the oldest calculating tools known to humanity. First used in Babylon around 2400 BC and later perfected in China around 500 BC, the abacus consists of beads that can be moved along rods to perform arithmetic operations. It was especially useful in trading and finance and is still used today in parts of Asia.

Summary of Key Developments

Machine	Year	Type	Contribution
Z1	1936–38	Mechanical	First programmable mechanical computer
ABC	1939–42	Electronic (non-programmable)	Introduced binary, electronic computation
Harvard Mark I	1943	Electromechanical	Used for military ballistics
ENIAC	1946	Electronic	First general-purpose digital computer
EDVAC	1952	Electronic	First stored-program design
UNIVAC I	1951	Commercial	First computer sold commercially
Osborne 1	1981	Portable	First widely-used portable computer
IBM PC	1981	Personal	Standardized and popularized personal computing

Generations of Computers

The history of modern computing is often categorized into **five generations**, each defined by a major technological breakthrough. These generations highlight the **evolution in speed, size, reliability, and capability** of computers — from bulky vacuum tubes to intelligent AI systems.

1st Generation Computers (1946–1956)

Key Technology: Vacuum Tubes
Father Figure: Charles Babbage (conceptually), Eckert & Mauchly (practical implementation)

Overview:

- First true electronic computers
- Relied on **vacuum tubes** for processing and storage
- Required **special air-conditioned rooms** due to heat
- Extremely **large and expensive**
- Consumed **huge amounts of electricity**

MCQs – History of Computers

1. What did the term "computer" originally refer to?
A) Machines
B) Programmers
C) People who calculated
D) Typewriters

2. In which year was the term "computer" first used in English?
A) 1500
B) 1613
C) 1705
D) 1801

3. Which of the following was used for keeping records rather than calculation?
A) Abacus
B) Napier's Bones
C) Tally Sticks
D) Slide Rule

4. The abacus was first used around:
A) 1600 AD
B) 500 AD
C) 2400 BC
D) 1000 BC

5. Which device used rods to simplify multiplication?
A) Stepped Reckoner
B) Napier's Bones
C) Pascaline
D) Slide Rule

6. Who invented the Slide Rule?
A) John Napier
B) Blaise Pascal
C) William Oughtred
D) Gottfried Leibniz

7. Pascaline could perform which two operations?
A) Addition and division
B) Subtraction and multiplication
C) Addition and subtraction
D) Multiplication and division

8. The Stepped Reckoner was an improvement of which machine?
A) Abacus
B) Slide Rule
C) Pascaline
D) Arithmometer

9. Which was the first commercially successful mechanical calculator?
A) Z1
B) Stepped Reckoner
C) Pascaline
D) Arithmometer

10. Who built the Difference Engine and Analytical Engine?
A) Ada Lovelace
B) Charles Babbage
C) Alan Turing
D) Konrad Zuse

11. Who is considered the first computer programmer?
A) Grace Hopper
B) Augusta Ada Byron
C) Charles Babbage
D) William Shockley

12. What was the purpose of the Jacquard Loom?
A) Store data
B) Weave fabric patterns using punch cards
C) Perform arithmetic
D) Program binary code

13. The Tabulating Machine was developed by:
A) Charles Babbage
B) John von Neumann
C) Herman Hollerith
D) Ted Hoff

14. The Tabulating Machine was first used in:
A) US Army
B) British Parliament

Past Papers Questions

1. Charles Babbage is the father of computer was an English polymath.
2. The term 'Computer' is derived from Latin.
3. Father of C 'programming language' Dennis Ritchie.
4. Allen Turing is the father of computer science.
5. IBM first pioneered floppy disc.
6. PC was originally a trademark of IBM.
7. SPSS (Statistical Package for the Social Sciences) developed by IBM.
8. ENIAC was the first truly electronic computer.
9. The first computer virus Brain.
10. Marcian Hoff produced the first microprocessor named as 4004.
11. Hewlett Packard (HP) famous computer company was born in a garage near Palo Alto. California.
12. Abacus often referred to as the ancient computers.
13. AutoCAD is used in architectural design.

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INTRODUCTION TO COMPUTER

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Introduction to Computer

What is a Computer?

A **computer** is an electronic device that accepts input, processes it according to a set of instructions (software), and produces output. It can also store data for future use and retrieve it when needed. Computers follow logical steps known as algorithms to perform tasks ranging from simple calculations to complex problem-solving.

Basic Functions of a Computer:

- **Input:** Receiving data and instructions from devices like keyboard, mouse, or sensors
- **Processing:** Performing calculations or operations using the Central Processing Unit (CPU)
- **Storage:** Saving data temporarily (RAM) or permanently (Hard Drive, SSD)
- **Output:** Displaying or sending results to output devices such as monitors, printers, or speakers

Definition:

"A computer is a programmable machine that stores, retrieves, and processes data based on a set of commands." – General Definition

Key Characteristics with Examples:

- **Speed:** Computers can perform millions of operations per second. For instance, a simple calculator on a phone can solve complex equations instantly.
- **Accuracy:** Unlike humans, computers do not make errors unless the input or logic is wrong.
- **Automation:** Once programmed, a computer can complete tasks without human intervention (e.g., automatic backup of data at midnight).
- **Storage Capacity:** Computers can store large amounts of data. A 1TB hard drive can store around 250,000 songs.
- **Versatility:** A computer can switch from word processing to gaming or video editing by simply running different software.

Real-Life Examples:

- **In Education:** Used for online learning, research, presentations
- **In Banking:** ATM machines process transactions

Judgment	Can make moral and ethical decisions	Cannot judge, only follows logic

Computers are tools that extend human capability but lack emotional intelligence and ethical reasoning.

Glossary

Term	Definition
Computer	An electronic device that processes data into information.
Data	Raw facts and figures without any context.
Information	Organized or processed data that is meaningful and useful.
IT (Information Technology)	The use of computers and software to manage information.
Hardware	The physical components of a computer system.
Software	A set of instructions or programs that tell a computer what to do.
Input Device	Devices used to enter data into a computer (e.g., keyboard, mouse).
Output Device	Devices that show the result of processed data (e.g., monitor, printer).
CPU	Central Processing Unit – the brain of the computer where processing takes place.
RAM	Random Access Memory – temporary memory used during processing.
ROM	Read-Only Memory – permanent memory that contains startup instructions.
Operating System	Software that manages computer hardware and software resources.
Application Software	Software used for specific tasks (e.g., Word processors, browsers).
Network	A system of connected computers and devices that share data.
Internet	A global network connecting millions of computers for information sharing.
AI	Artificial Intelligence – computers mimicking human intelligence.

MCQ- Introduction to Computer

1. What is a computer?
A) A machine that washes clothes
B) A device that flies
C) An electronic machine that processes data
D) A storage device

2. Which of the following is not a basic function of a computer?
A) Input
B) Processing
C) Transportation
D) Output

3. Temporary data is stored in:
A) SSD
B) Hard disk
C) RAM
D) CD-ROM

4. What does CPU stand for?
A) Computer Processing Unit
B) Central Processing Unit
C) Control Process Utility
D) Core Processing Unit

5. Which of the following is an example of input device?
A) Monitor
B) Printer
C) Scanner
D) Speaker

6. What does ROM store?
A) Temporary instructions
B) Operating system
C) Startup instructions
D) Audio files

7. Which is an example of application software?
A) Windows
B) Linux
C) MS Word
D) BIOS

8. What is the role of a modem?
A) Save files
B) Run programs
C) Connect to internet
D) Increase speed

9. Information is:
A) Raw data
B

10. Which of the following is qualitative data?
A) 45
B) 97.5
C) Green
D) 100°C

11. Which of these is not an output device?
A) Monitor
B) Printer
C) Mouse
D) Speaker

12. What type of computer is used in MRI and ECG machines?
A) Analog
B) Digital
C) Hybrid
D) Super

13. Example of a general-purpose computer:
A) ATM
B) Traffic light controller

Past Papers Questions

1. When sound is included in the animations, it becomes Multimedia.
2. Multimedia software is used to create visual presentations with the help of audio and video clips.
3. Adobe flash player is an example of multimedia software.
4. Encyclopedia is an example of reference.
5. Graphic software is used to draw pictures, 3D-images and animation.
6. 3D printing is also known as additive manufacturing.
7. Image viewer is a program that is used to view and manage images.
8. Adobe Acrobat convert the file in pdf.
9. The most commonly used type of software in industry, offices and WAN is Horizontal market software.
10. Operating system, editors and debuggers comes under system software.
11. Many programmers call writing the software Program is Coding.
12. Checks that should be performed before downloading a software include System requirements verification.
13. Generally, the most useful help document during the installation of software is License information.
14. Licensed CD/DVD can be the most trusted source to the software installation.
15. Generally one of the best practices during the installation of software is close all the user's running programs.
16. Most of the installation begin by auto run feature otherwise the installation can be started by selecting Setup.exe
17. The software that are available free of cost is called Freeware.
18. Another name for free software is Public Domain Software.
19. If you want to repair software bug, it is available free of cost on internet called Free Tutorial.
20. Installation is used to store software in the computer.

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DATA COMMUNICATION

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Data Communication

Introduction to Data Communication

Data Communication is the exchange of digital information between two or more devices using a medium such as cables, fiber optics, or wireless signals. These devices can be computers, smartphones, sensors, or other digital systems.

Definition: Data communication is the process of using computing and telecommunication technologies to transmit data between devices or systems.

It is essential in enabling modern applications such as emails, messaging, cloud storage, and internet browsing. Without it, modern digital services could not function.

Importance of Data Communication

Data communication plays a vital role in every sector:

- **Education:** Supports e-learning, online exams, digital libraries
- **Healthcare:** Enables telemedicine, remote diagnostics, data sharing
- **Business:** Drives communication tools like email, video calls, data transfer
- **Government:** Supports secure data systems and public service portals
- **Daily Life:** Powers online banking, social media, streaming, gaming

In today's digital world, data communication is as essential as electricity.

Basic Components of Data Communication

Every communication system has these five core components:

Component	Role
Message	The data (text, image, video, etc.) to be communicated
Sender	The device or person initiating the message
Receiver	The device or person receiving the message

DATA COMMUNICATION – MCQs

1. Which component of data communication determines the format and timing of messages?

(a) Protocol
(b) Sender
(c) Receiver
(d) Medium

2. In which mode of transmission is data sent in both directions simultaneously?

(a) Simplex
(b) Half Duplex
(c) Full Duplex
(d) Asynchronous

3. The term "bit synchronization" is most closely associated with which encoding method?

(a) NRZ
(b) AM
(c) Manchester
(d) FM

4. Which signal type is ideal for transmitting digital data over analog media?

(a) Analog
(b) Binary
(c) Pulse
(d) Modulated

5. Which of the following transmission media provides the highest speed and security?

(a) Twisted pair
(b) Coaxial cable
(c) Fiber optics
(d) Radio waves

6. Which device provides wireless access to a wired LAN?

(a) Router
(b) Modem
(c) Access Point
(d) Switch

7. Which of the following allows secure communication over a public network?

(a) PAN
(b) LAN
(c) VPN
(d) MAN

8. Which network type connects computers within a school?

(a) PAN
(b) MAN
(c) WAN
(d) LAN

9. What ensures data integrity in the presence of transmission errors?

(a) Modulation
(b) Encoding
(c) Error detection
(d) Compression

10. What method involves adding extra bits to detect data errors?

(a) CRC
(b) NRZ
(c) Ping
(d) Protocol

11. Which OSI layer is responsible for routing data using logical addresses?

(a) Network
(b) Data Link
(c) Physical
(d) Session

Past Papers Questions:

1. Multiplexing is a technique that is used to send more than one call over a single line.
2. The inner core of an optical fiber is Glass or plastic in composition.
3. Cable consists of an inner copper core and a second conducting outer sheath is Coaxial.
4. A television broadcast is an example of SIMPLEX transmission.
5. Full duplex transmission mode is the communication two-way with the channel being used by both connected devices simultaneously.
6. Optical fiber is made of purified Silica.

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NETWORK AND INTERNET

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Network and Internet

Introduction to Internet and Networking

What is the Internet?

The Internet is a vast global communication network that connects millions of private, public, academic, business, and government networks. It provides access to a wealth of knowledge, tools, entertainment, communication platforms, and services. This interconnectivity is made possible through protocols that standardize how data is sent and received across different systems and devices.

At its core, the Internet works like a postal system for digital information, allowing data to be packaged, addressed, transmitted, and delivered across the world in seconds.

Key Characteristics of the Internet:

- **Decentralized:** No single entity owns or governs it entirely.
- **Scalable:** Easily grows to support billions of users.
- **Open Standards:** Uses protocols like TCP/IP that are universally accepted.

What is Networking?

Networking is the interconnection of computers and devices using either cables (wired) or wireless signals. It allows for the exchange of data, the sharing of resources (like printers and files), and communication through applications such as email or video conferencing.

Networks are the backbone of the Internet, allowing devices to talk to each other within homes, schools, businesses, and beyond.

Basic Concepts in Networking:

- **Node:** Any device **connected to a network (computer, printer, router).**
- **Link:** The communication pathway between nodes.
- **Bandwidth:** The amount of data that can pass through a network connection in a given time**.**
- **Latency:** The delay before a data transfer begins.

Types of Communication Models:

- **Client-Server Model:** Centralized model where a client requests and a server provides services.

IoT (Internet of Things): Smart homes, wearable devices

Glossary

Term	Definition
IP Address	Unique identifier assigned to a device on the internet
DNS	System that converts domain names to IP addresses
ISP	Organization that provides internet access
Protocol	A standard set of rules for data communication
Firewall	System designed to prevent unauthorized access
Router	Device that directs data across networks
TCP/IP	Protocols used for data transmission over the internet
LAN	Network in a small area like a home or school
HTTP	Protocol used to transfer web pages
Phishing	Online fraud attempt to steal personal data
Packet	Small unit of data transmitted over a network
Modem	Device that connects your network to the internet
Malware	Malicious software that harms your device
Topology	Layout of how computers are connected in a network

MCQ – Network and Internet

1. What is the main function of protocols like TCP/IP in the Internet?

   A) Encrypt user data
   B) Define rules for data transmission
   C) Block suspicious content
   D) Allocate bandwidth

2. Which characteristic of the Internet allows it to function without a single point of failure?

   A) Open Standards
   B) Centralized Control
   C) Decentralization
   D) Firewalls

3. In networking, what is a "node"?

   A) A server only
   B) Any connected device
   C) Only routers and switches
   D) A protocol address

4. What does latency in a network refer to?

   A) Number of users
   B) Delay before data transfer starts
   C) Maximum speed
   D) Device location

5. Which communication model features both client and server roles in every device?

   A) Star topology
   B) Hybrid model
   C) Peer-to-Peer
   D) Client-Server

6. What year was ARPANET launched?

   A) 1973
   B) 1969
   C) 1983
   D) 1990

7. Who invented the first network-based email system?

   A) Vint Cerf
   B) Bob Kahn
   C) Ray Tomlinson
   D) Tim Berners-Lee

8. Which of the following marked the official birth of the Internet?

   A) Launch of Google
   B) Introduction of WWW
   C) Standardization of TCP/IP
   D) Creation of DNS

9. What was the name of the first graphical web browser?

   A) Netscape
   B) Internet Explorer
   C) Mosaic
   D) Firefox

10. What technological development enabled the rise of mobile internet?

    A) Modem
    B) Fiber optics
    C) Smartphones
    D) DNS

11. Which network type would be used to connect devices in a home?

Past Papers Questions

1. Ethernet cable type of connection would be used to connect a printer directly to a network.
2. The communication protocol used for Internet is TCP/IP.
3. 67 percentage of world's population has internet access.
4. Internet is commonly known as WAN.
5. Father of internet is Vincent Cerf.
6. Internet is Network of network.
7. SMTP protocol provides email facility among different hosts.
8. Every computer connected to an intranet or extranet must have a distinct Proxy server.
9. The Internet developed in 1969 with the creation of ARPANET, or the Advanced Research Projects Agency Network.
10. The first Network is called ARPANET.
11. Default port of HTTP Is 80.
12. AVI (Audio Video Interleaved) is widely used for transmitting streaming videos data on the internet.
13. Internet 2 is it research consortium for advance internet and research and development.
14. URL is used for webpage and web address.
15. URL is the name for a Web page Address.
16. By using a firewall, the risk of unauthorized computer system access is reduced when connected to an internet.
17. Search engine maintain a date base of webpages containing information on variety of topics.
18. Commonly used method to access internet is Broadband with Coaxial Cable, Fiber optics or Wi-Fi Copper Wires.
19. Domain Server is down is not a major reason for an email bounce.
20. Website used intonation is called Tracker.

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INTERNET AND BROWSING

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Internet Browsing

What is Internet Browsing?

Internet browsing, also known as **web browsing**, refers to the process of navigating and accessing content on the World Wide Web using a software tool called a **web browser**.

How It Works:

- A user opens a web browser (e.g., Chrome, Firefox, Safari).
- They type a **web address (URL)** into the address bar.
- The browser sends a request to a web server to fetch the required web page.
- The server responds with data (HTML, CSS, images, etc.) which the browser displays to the user.

Purpose of Internet Browsing:

- To access websites, articles, images, videos, and web applications.
- To search for information using search engines like Google, Bing, or Yahoo.
- To use online services such as email, social media, banking, and e-learning.

Common Activities While Browsing:

- Reading news or blogs
- Watching YouTube videos
- Checking weather forecasts
- Sending emails via webmail (like Gmail)
- Shopping online

Devices Used for Browsing:

- Desktop and laptop computers
- Smartphones and tablets
- Smart TVs and other internet-enabled devices

Evolution and History of Web Browsers

Web browsers have come a long way since the early days of the internet. They are now essential tools for accessing and interacting with online content.

MCQ – Internet Browsing

1. What is Internet browsing?

   A) Creating websites
   B) Programming web servers
   C) Accessing the World Wide Web via a browser
   D) Managing email accounts

2. What is the main role of a web browser?

   A) Send emails
   B) Provide cloud storage
   C) Retrieve and display web content
   D) Host websites

3. Which of the following is NOT a purpose of internet browsing?

   A) Playing offline games
   B) Accessing websites
   C) Using email and social media
   D) Online shopping

4. What software is required for browsing the internet? A) Antivirus
   B) Web browser
   C) Firewall
   D) Operating system

5. Which device is commonly used for internet browsing? A) Printer
   B) Smartphone
   C) Scanner
   D) Webcam

6. What does a URL represent? A) User Recognition Level
   B) Universal Resource Lock
   C) Uniform Resource Locator
   D) Universal Routing Link

7. What is typically typed into the address bar of a browser? A) IP address only
   B) Website name
   C) Username
   D) MAC address

8. What happens after a user enters a web address?

   A) Computer shuts down
   B) Browser sends request to server
   C) Files are deleted
   D) Password prompt appears

9. Which browser was the first to support graphics and text?

   A) Internet Explorer
   B) Chrome
   C) Mosaic
   D) Firefox

10. Who developed the first web browser?

    A) Larry Page
    B) Bill Gates
    C) Tim Berners-Lee
    D) Steve Jobs

11. Which browser became dominant in the early 2000s?

    A) Safari
    B) Netscape
    C) Internet Explorer
    D) Chrome

12. Which browser is known for strong privacy features?

Past Papers Questions

1. Internet is mostly used for Email.
2. In 1971 first ever email sent.
3. In email address name of the email service provider comes after @sign.
4. Email consist of two parts one is username and other is password.
5. In email account, address book contains a list of name and email addresses.
6. @ is a sign of email. @ Symbol is essential for email.
7. Username is a unique name chosen by a user while creating an email.
8. Answering a received Email is called Reply an Email.
9. Slowest response while collecting data is called Email.
10. Email bankruptcy is deleting or ignoring all emails older than a certain date, due to an overwhelming volume of messages.
11. Email fatigue is a state that occurs when consumers get tired of receiving email. They start to ignore messages, delete them, unsubscribe, or even worse - they send your emails to their spam folder.
12. Tim Berners Lee gave the idea to combine the internet with Hypertext concept.
13. Exe. type of file cannot be attached with email.
14. Google is the largest internet search engine.
15. Google + is an example of flicker.
16. Bing is the second largest search engine developed by Microsoft.
17. Yahoo is the third largest search engine.
18. Oldest search engine of internet is Yahoo. Founded in 1995.
19. Search engine, which is most popular in China, is Baidu. And 4th largest search engine in world.
20. Twitter is a social network service.
21. Yahoo is a news website and search engine.
22. Hotmail, Gmail and Yahoo are Email server.
23. First widely available web browser, Mosaic released in 1993.
24. The browser cache keeps a list of web pages you have visited in the current session.

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WINDOWS

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Windows

What is Windows?

Microsoft Windows is a graphical operating system developed by Microsoft. It provides a user-friendly environment that enables users to interact with their computer using windows, icons, menus, and a pointer (mouse cursor), often referred to as the **WIMP** model.

Originally launched in 1985 as a graphical shell for MS-DOS, Windows has evolved into the most widely used desktop operating system in the world.

Basic Functions of Windows:

- Provides a graphical interface (GUI) to access files and applications
- Manages system resources like memory, storage, and connected devices
- Supports multitasking and multiple user environments
- Ensures security with user authentication and system updates
- Offers accessibility features and customization options

Real-Life Examples of Windows Use:

- Students using Windows for writing assignments and attending virtual classes
- Office workers using Excel and PowerPoint
- Designers using Adobe Creative Suite on Windows PCs

History and Versions

The history of Windows began in the mid-1980s and has seen many changes in both design and functionality. Windows has developed through decades of innovation, continuously adapting to meet user needs.

Timeline of Key Windows Releases:

Version	Release Year	Highlights
Windows 1.0	1985	First GUI shell for MS-DOS; introduced overlapping windows concept
Windows 3.1	1992	Widely adopted; introduced TrueType fonts, multimedia, and File Manager

Popular Operating Systems Compared:

Feature	Windows	macOS	Linux	Android	iOS
Developed by	Microsoft	Apple	Open Source (Community)	Google	Apple
Interface	Graphical (Start Menu, Taskbar)	Graphical (Dock, Finder)	Varies by distro	Touchscreen-focused	Touchscreen-focused
Target Users	Home, Business, Education	Creative, Design, Business	Developers, Servers	Mobile users	Apple mobile users
Customizability	Moderate	Low	High	Low to moderate	Low
Security	Regular updates, antivirus needed	Highly secure	Very secure (open-source)	Secure with Play Store policies	Secure with App Store policies
Cost	Paid or pre-installed	Paid (with Apple devices)	Free	Free	Paid (with Apple devices)

1. Windows vs. macOS

- **Windows** is available on a wide variety of hardware from different manufacturers, offering flexibility.
- **macOS** runs only on Apple hardware, offering tight integration and a clean user experience.
- Windows is more widely used in offices and schools, while macOS is popular among creative professionals.

2. Windows vs. Linux

- **Linux** is an open-source system that is free to use and can be customized extensively.
- Windows is easier for beginners, while Linux is often favored by developers and advanced users.
- Linux is more commonly used on servers, while Windows dominates the consumer desktop market.

MCQ – Windows

1. What is Microsoft Windows?

   A) An internet browser
   B) A programming language
   C) A graphical operating system
   D) A hardware device

2. What model does Windows use for user interaction?

   A) WIMP (Windows, Icons, Menus, Pointer)
   B) GUI (Graphical User Interface) only
   C) CLI (Command Line Interface)
   D) DOS

3. What is the primary function of Windows?

   A) Run antivirus
   B) Browse the internet only
   C) Manage hardware and software
   D) Design websites

4. Which of the following is a basic function of Windows?

   A) Creating hardware components
   B) Providing a command line interface only
   C) Managing system resources
   D) Accessing only emails

5. How does Windows support multitasking?

   A) Allows only one app to run
   B) Uses two processors
   C) Allows multiple applications to run simultaneously
   D) Runs without internet

6. Which version of Windows introduced the Start Menu?

   A) Windows 3.1
   B) Windows 95
   C) Windows XP
   D) Windows ME

7. Which Windows version was released in 2001?

   A) Windows ME
   B) Windows 98
   C) Windows XP
   D) Windows Vista

8. What major interface change was introduced in Windows Vista?

   A) Start Menu
   B) Snap Layouts
   C) Aero Glass interface
   D) Cortana

9. What is a major feature of Windows 7?

   A) Poor performance
   B) File Manager introduction
   C) Improved speed and usability
   D) Centered Start Menu

10. Which version introduced the tile-based Start screen?

    A) Windows 7
    B) Windows 10
    C) Windows 8
    D) Windows XP

Past Papers Question

1. File manager Helps user to locate, rename, move, copy, and delete files.
2. Disk cleanup is a utility program.
3. Disk cleanup is used as a disk scanner in Microsoft window.
4. Window explorer is utility program.
5. Add or remove is utility program.
6. The most important examples of operating systems are Microsoft Windows, DOS, and UNIX, Linux, and Mac OS etc.
7. From ROM BIOS the 1st computer instruction available on boot up.
8. BIOS are used for Loading Operating system.
9. BIOS is stored in Flash Memory Chip.
10. POST is program run by BIOS to check hardware components are working properly while computer is Turned ON.
11. The process of starting an operating system when the user turns on a computer is known as Booting.
12. The primary purpose of an operating system is to make the most efficient use of the computer hardware.
13. Help Menu is available at Start button.
14. In Microsoft Window 7, Gadget can give you information about weather.
15. Weather, Date and Time and News Gadget in Window (Recycle Bin is not Gadget).
16. "Add new hardware" option exists in control panel.
17. Window 8 does not have Start button.
18. From Control Panel user account can be changed.

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Microsoft Office (MS Office)

Microsoft Office is a software which was developed by Microsoft in 1988. This Office suite comprises various applications which form the core of computer usage in today's world.

MS Office Applications & its Functions

Currently, MS Office 2016 version is being used across the world and all its applications are widely used for personal and professional purposes.

Discussed below are the applications of Microsoft Office along with each of their functions.

1. MS Word

- First released on October 25, 1983
- Extension for Doc files is ".doc"
- It is useful in creating text documents
- Templates can be created for Professional use with the help of MS Word
- Work Art, colours, images, animations can be added along with the text in the same file which is downloadable in the form of a document
- Authors can use for writing/ editing their work

2. MS Excel

- Majorly used for making spreadsheets
- A spreadsheet consists of grids in the form of rows and columns which is easy to manage and can be used as a replacement for paper
- It is a data processing application
- Large data can easily be managed and saved in tabular format using MS Excel
- Calculations can be done based on the large amount of data entered into the cells of a spreadsheet within seconds
- File extension, when saved in the computer, is ".xls"

3. MS PowerPoint

- It was released on April 20, 1987
- Used to create audiovisual presentations
- Each presentation is made up of various slides displaying data/ information
- Each slide may contain audio, video, graphics, text, bullet numbering, tables etc.

Microsoft Office Versions

When the Office suite was first released, it was entirely devoted for usage in computer systems but later with time the Office suite was modified for use in Laptops, Tablets and Mobile phones.

Given below are the various versions of Microsoft Office along with the years in which the version was released:

Version name	Release Date/ Year
Microsoft Office for Windows	October 1990
Microsoft Office 3.0	August 30, 1992
Microsoft Office 4.x	1994
Microsoft Office 1995	August 24, 1995
Microsoft Office 1997	1997
Microsoft Office 2000	June 7, 1997
Microsoft Office XP	May 31, 2001
Microsoft Office 2003	October 21, 2003
Microsoft Office 2007	January 30, 2007
Microsoft Office 2010	June 15, 2010
Microsoft Office 2013	January 30, 2012
Microsoft Office 2016	September 22, 2015

All the above-mentioned dates are for the Office suite released for Windows. Apart from these, the versions Online, for Mac and for Mobile Phones were released separately

.

MCQ– Microsoft Office

1. When was Microsoft Office first developed?
   A) 1995
   B) 1988
   C) 1992
   D) 2001

2. Which company developed Microsoft Office?
   A) Apple
   B) IBM
   C) Microsoft
   D) Google

3. What is the extension of MS Word files?
   A) .xls
   B) .doc
   C) .ppt
   D) .txt

4. MS Word is primarily used to:
   A) Create presentations
   B) Manage databases
   C) Write and edit documents
   D) Send emails

5. Which MS Office application is used to create spreadsheets?
   A) MS Word
   B) MS Excel
   C) MS Access
   D) MS Outlook

6. What is the extension of files created in MS Excel?
   A) .doc
   B) .ppt
   C) .xls
   D) .accdb

7. MS Excel organizes data in:
   A) Pages
   B) Slides
   C) Grids (rows and columns)
   D) Paragraphs

8. Which MS Office application is used to create presentations?
   A) MS Word
   B) MS Outlook
   C) MS PowerPoint
   D) MS Excel

9. What is the file extension for MS PowerPoint?
   A) .ppt
   B) .doc
   C) .xls
   D) .pst

10. Presentations in PowerPoint consist of:
    A) Pages
    B) Slides
    C) Tables
    D) Worksheets

11. MS Access is used for:
    A) Sending emails
    B) Creating spreadsheets
    C) Managing databases
    D) Writing notes

12. What is the file extension of MS Access?
    A) .docx
    B) .pst

Past Papers Questions

1. Outlook Tasks use for Manage to-do items.
2. PST is the filename extension for an outlook data file.
3. Messaging client term describes outlook.
4. Microsoft outlook is an Email service.
5. Outlook Software application was not part of the first version of Microsoft Office.
6. MS Access is a DBMS type of software.
7. MS Access can be used by data architects, software developers and power users. Store data in the form of tables are the major use of MS Access.
8. MS Access is an example of Application Software.
9. MS Access is famous brand of Microsoft Company.
10. MS Access is a product of Microsoft which is not available in Linux operating system.
11. 1992 first version of MS Access was released.
12. In MS-Access to create a new table, in which method you, do not need to specific the field type and size (Create Table by Entering Data).
13. MDB is the extension of Microsoft access.
14. TEXT data type allows alphanumeric characters and special symbols in MS-ACCESS.
15. Picture is not a valid data type in MS Access.
16. To create a form Wizard, we use 4 Tables. (Columnar, Tabular, Data Sheet and Justified).
17. From Wizard, 1h MS-Access can build form that can display field from MANY tables.

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Microsoft Word (MS Word)

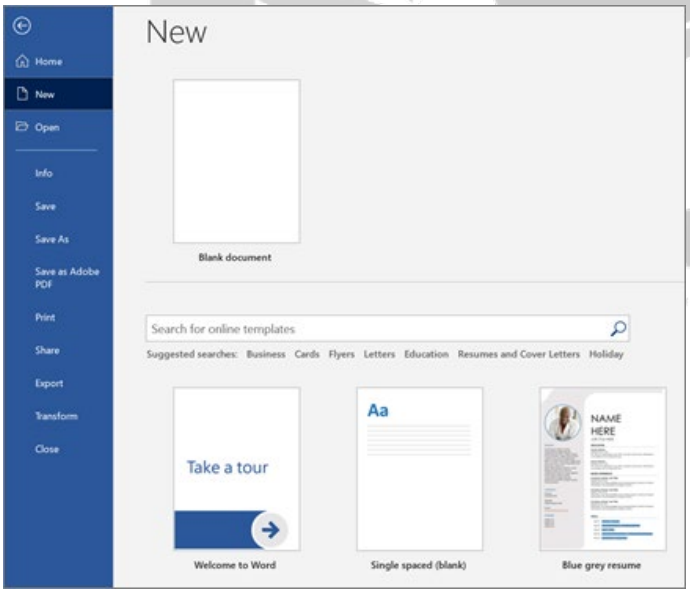
With Word you can:

- Create a document from scratch or from a template .
- Add text, images, art, and videos.
- Research a topic and find credible sources.
- Access your documents from a computer, tablet, or phone via OneDrive.
- Share your documents and collaborate with others.
- Track and review changes.

Create a new document

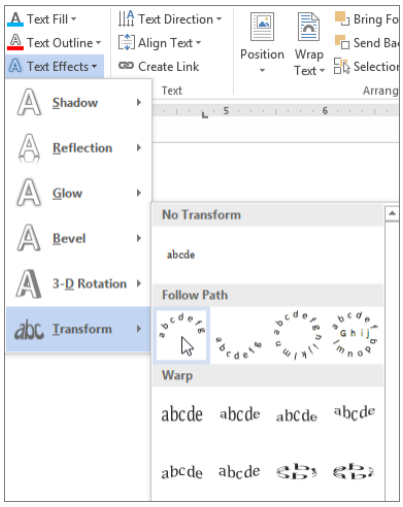
1. On the **File** tab, select **New.**
2. Select **Blank document,** or double-click a template image or type the kind of document into the **Search for online templates** box and press **Enter.**

Tip: For practice using Word features, try a learning guide like **Welcome to Word** or **Insert your first table of contents**.



Add and format text

1. Click on your new blank page and type some text.



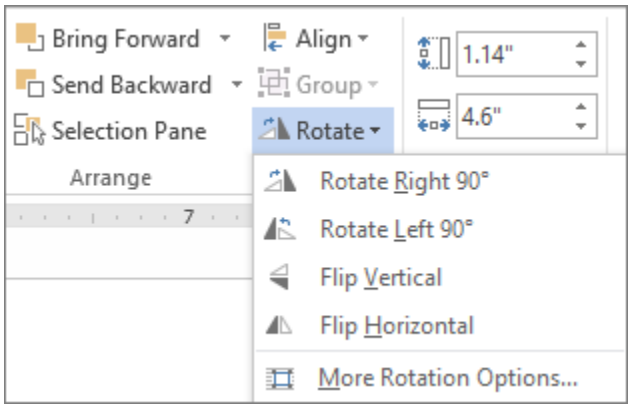
Pick the effect you want.

3. Click outside of your text box to see the effect.

Rotate it

1. Select the WordArt, and then drag the circular rotation handle at the top of the box.

2. To flip WordArt or rotate it 90 degrees, go to **Shape Format** or **Drawing Tools Format** > **Rotate**, and then select an option.



MCQ – Microsoft Word

1. Which tab is used to create a new blank document in Word?
   A) Home
   B) File
   C) Insert
   D) View

2. What tab do you use to insert pictures, tables, and charts?
   A) Design
   B) View
   C) Insert
   D) Format

3. Which tool lets you copy formatting from one part of text to another?
   A) Format Copier
   B) Style Brush
   C) Format Painter
   D) Font Cloner

4. How can you add text to a Word document?
   A) Click Insert > Text Field
   B) Drag and Drop
   C) Place cursor and type
   D) Click Format > Add Text

5. How do you replace existing text in Word?
   A) Click Edit > Replace
   B) Select and type over it
   C) Use the Erase Tool
   D) Click Format > Replace

6. Which ribbon tab includes Bold, Italic, and Underline?
   A) View
   B) Insert
   C) Home
   D) Format

7. What does Word use to store and sync files online?
   A) Outlook
   B) Bing
   C) OneDrive
   D) Skype

8. Which format is best for adding bullet points?
   A) Insert tab
   B) Home tab
   C) Layout tab
   D) Design tab

9. What feature automatically saves your work in OneDrive?
   A) AutoBackup
   B) AutoStore
   C) AutoSave
   D) QuickSave

10. To insert a table in Word, go to:
    A) Insert > Table
    B) File > Table
    C) Design > Table
    D) Layout > Table

11. What allows you to wrap text around a picture?
    A) Picture Tools > Layout Options
    B) View > Wrap Text
    C) Format > Fit Text
    D) Insert > Text Options

12. What is WordArt used for?
    A) Data entry
    B) Artistic text design
    C) Font replacement
    D) Document templates

13. Which option rotates a picture or shape?
    A) Insert > Rotate Image
    B) Layout > Turn

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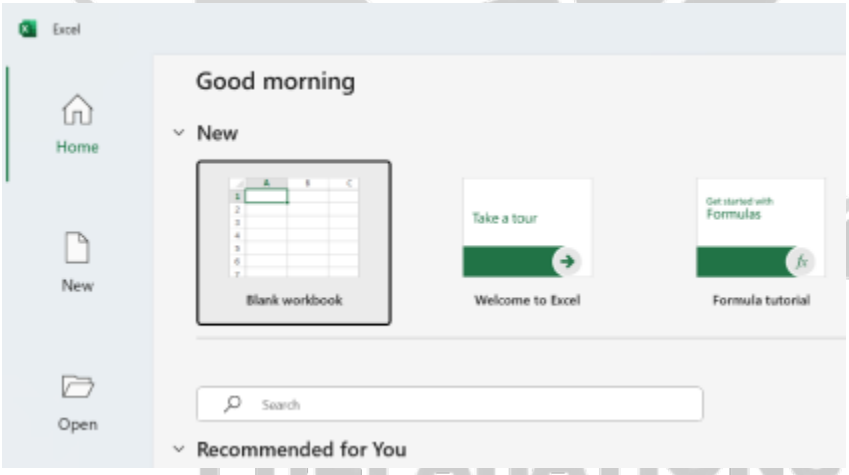
Microsoft Excel (MS Excel)

What is Excel?

Excel makes it easy to crunch numbers. With Excel, you can streamline data entry with AutoFill. Then, get chart recommendations based on your data, and create them with one click. Or easily spot trends and patterns with data bars, color coding, and icons.

Create a workbook

1. Open Excel.
2. Select **Blank workbook**. Or press **Ctrl+N**.



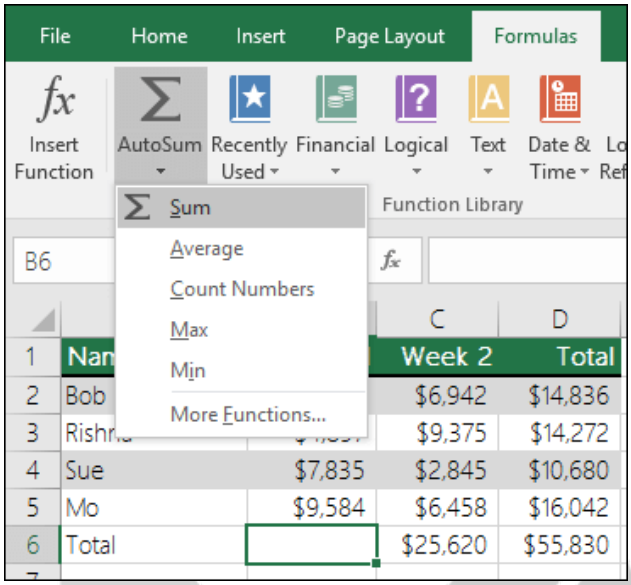
Enter data

To manually enter data:

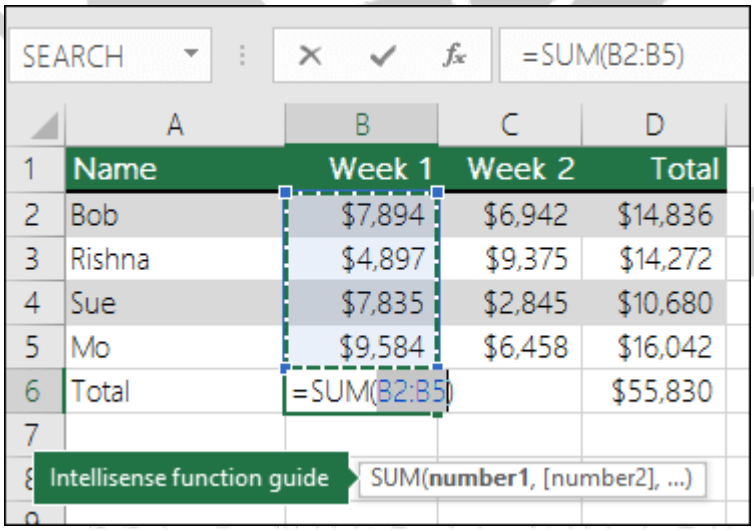
1. Select an empty cell, such as A1, and then type text or a number.
2. Press **Enter** or **Tab** to move to the next cell.

To fill data in a series:

1. Enter the beginning of the series in two cells: such as Jan and Feb; or 2014 and 2015.



AutoSum vertically

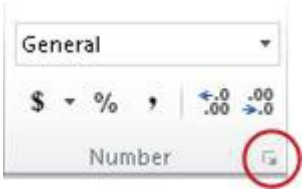


In the figure above, the AutoSum feature is seen to automatically detect cells B2:B5 as the range to sum. All you need to do is press ENTER to confirm it. If you need to add/exclude more cells, you can hold the Shift Key + the arrow key of your choice until your selection matches what you want. Then press Enter to complete the task.

Intelligence function guide: the SUM(number1,[number2], …) floating tag beneath the function is its Intelligence guide. If you click the SUM or function name, it will change o a blue hyperlink to the Help topic for that function. If you click the individual function elements, their representative pieces in the formula will be highlighted. In this case, only B2:B5 would be highlighted, since there is only one number reference in this formula. The Intellisense tag will appear for any function.

Number formats

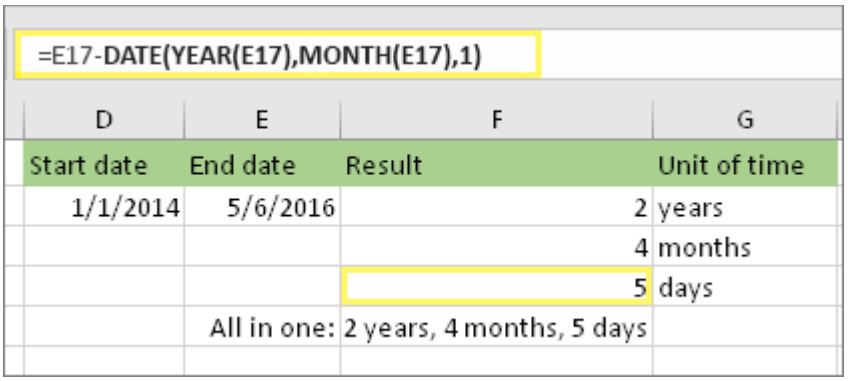
To see all available number formats, select the Dialog Box Launcher next to **Number** on



the **Home** tab in the **Number** group.

Format	Description
General	The default number format that Excel applies when you type a number. For the most part, numbers that are formatted with the **General** format are displayed just the way you type them. However, if the cell is not wide enough to show the entire number, the **General** format rounds the numbers with decimals. The **General** number format also uses scientific (exponential) notation for large numbers (12 or more digits).
Number	Used for the general display of numbers. You can specify the number of decimal places that you want to use, whether you want to use a thousands separator, and how you want to display negative numbers.
Currency	Used for general monetary values and displays the default currency symbol with numbers. You can specify the number of decimal places that you want to use, whether you want to use a thousands separator, and how you want to display negative numbers.
Accounting	Also used for monetary values, but it aligns the currency symbols and decimal points of numbers in a column.
Date	Displays date and time serial numbers as date values, according to the type and locale (location) that you specify. Date formats that begin with an asterisk (*) respond to changes in regional date and time settings that are specified in Control Panel. Formats without an asterisk are not affected by Control Panel settings.

3. **Use a different formula to find days.**



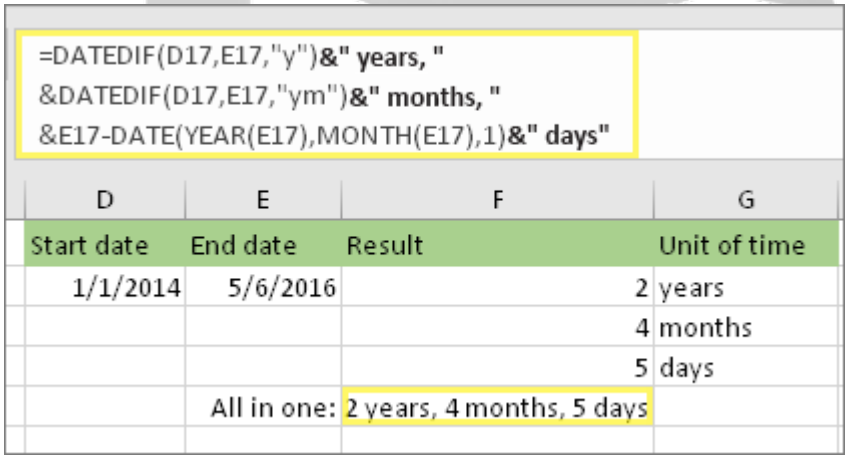
=E17-DATE(YEAR(E17),MONTH(E17),1)

D	E	F	G
Start date	End date	Result	Unit of time
1/1/2014	5/6/2016	2	years
		4	months
		5	days
	All in one:	2 years, 4 months, 5 days	

Now we need to find the number of remaining days. We'll do this by writing a different kind of formula, shown above. This formula subtracts the first day of the ending month (5/1/2016) from the original end date in cell E17 (5/6/2016). Here's how it does this: First the DATE function creates the date, 5/1/2016. It creates it using the year in cell E17, and the month in cell E17. Then the **1** represents the first day of that month. The result for the DATE function is 5/1/2016. Then, we subtract that from the original end date in cell E17, which is 5/6/2016. 5/6/2016 minus 5/1/2016 is 5 days.

Warning: We don't recommend using the DATEDIF "md" argument because it may calculate inaccurate results.

4. Optional: Combine three formulas in one.



=DATEDIF(D17,E17,"y")&" years, "
&DATEDIF(D17,E17,"ym")&" months, "
&E17-DATE(YEAR(E17),MONTH(E17),1)&" days"

D	E	F	G
Start date	End date	Result	Unit of time
1/1/2014	5/6/2016	2	years
		4	months
		5	days
	All in one:	2 years, 4 months, 5 days	

You can put all three calculations in one cell like this example. Use ampersands, quotes, and text. It's a longer formula to type, but at least it's all in one. **Tip:** Press ALT+ENTER to put line breaks in your formula. This makes it easier to read. Also, press CTRL+SHIFT+U if you can't see the whole formula.

In general, it's best to place constants in individual cells where they can be easily changed if needed, then reference those cells in formulas.

Using references in Excel formulas

A reference identifies a cell or a range of cells on a worksheet, and tells Excel where to look for the values or data you want to use in a formula. You can use references to use data contained in different parts of a worksheet in one formula or use the value from one cell in several formulas. You can also refer to cells on other sheets in the same workbook, and to other workbooks. References to cells in other workbooks are called links or external references.

The A1 reference style

By default, Excel uses the A1 reference style, which refers to columns with letters (A through XFD, for a total of 16,384 columns) and refers to rows with numbers (1 through 1,048,576). These letters and numbers are called row and column headings. To refer to a cell, enter the column letter followed by the row number. For example, B2 refers to the cell at the intersection of column B and row 2.

To refer to	Use
The cell in column A and row 10	A10
The range of cells in column A and rows 10 through 20	A10:A20
The range of cells in row 15 and columns B through E	B15:E15
All cells in row 5	5:5
All cells in rows 5 through 10	5:10
All cells in column H	H:H
All cells in columns H through J	H:J
The range of cells in columns A through E and rows 10 through 20	A10:E20

examples use the formula =SUM(Sheet2:Sheet6!A2:A5) to add cells A2 through A5 on worksheets 2 through 6.

- **Insert or copy** If you insert or copy sheets between Sheet2 and Sheet6 (the endpoints in this example), Excel includes all values in cells A2 through A5 from the added sheets in the calculations.
- **Delete** If you delete sheets between Sheet2 and Sheet6, Excel removes their values from the calculation.
- **Move** If you move sheets from between Sheet2 and Sheet6 to a location outside the referenced sheet range, Excel removes their values from the calculation.
- **Move an endpoint** If you move Sheet2 or Sheet6 to another location in the same workbook, Excel adjusts the calculation to accommodate the new range of sheets between them.
- **Delete an endpoint** If you delete Sheet2 or Sheet6, Excel adjusts the calculation to accommodate the range of sheets between them.

The R1C1 reference style

You can also use a reference style where both the rows and the columns on the worksheet are numbered. The R1C1 reference style is useful for computing row and column positions in macros. In the R1C1 style, Excel indicates the location of a cell with an "R" followed by a row number and a "C" followed by a column number.

Reference	Meaning
R[-2]C	A relative reference to the cell two rows up and in the same column
R[2]C[2]	A relative reference to the cell two rows down and two columns to the right
R2C2	An absolute reference to the cell in the second row and in the second column
R[-1]	A relative reference to the entire row above the active cell
R	An absolute reference to the current row

When you record a macro, Excel records some commands by using the R1C1 reference style. For example, if you record a command, such as selecting the **AutoSum** button to insert a

Some Sample Formulas

Basic Formulas

Formula	Structure	Explanation
AVERAGE	=AVERAGE(A2:A10)	Returns a mathematical average of a given cell range
COUNT	=COUNT(A2:A10)	Returns the count of the numbers in given cell range
MAX	=MAX(A2:A10)	Finds the largest value in a given cell range
MEDIAN	=MEDIAN(A2:A10)	Returns the median value, or middle value, in a given cell range
MIN	=MIN(A2:A10)	Finds the smallest value in a given cell range
SUM	=SUM(A2:A10)	Totals numbers in a given cell range

Cell range A2:A10 is used above to indicate that each formula uses a cell range as it arguments

Time Formulas

Formula	Structure	Explanation
TODAY	=TODAY()	Volatile – takes no arguments – returns today's date
NOW	=NOW()	Volatile – takes no arguments – returns today's date and time
DATEDIF	=DATEDIF(Start Date, End Date, Unit)	Returns the number of years, months or days between two dates • Start Date – date furthest in the past • Unit could be "Y" for years, "M" for months or "D" for days • Units must be in double quotes • This formula is NOT in the function library
YEAR	=YEAR(Date)	• Returns the year portion of date • Example =YEAR(7/16/2005) would return 2005
MONTH	=MONTH(Date)	• Returns the month portion of date • Example =MONTH(7/16/2005) would return 7
DAY	=DAY(Date)	• Returns the day portion of date • Example =DAY(7/16/2005) would return 16

Use a time formula and get an answer you didn't expect? If you got a date and were expecting a number, remember to change the formatting from date to number. If you got a number and were expecting a date, change the formatting to date

MCQ – Microsoft Excel

1. What is the primary use of MS Excel?

   A) Writing letters
   B) Creating databases
   C) Making spreadsheets
   D) Designing graphics

2. A file created in MS Excel is saved with which extension?

   A) .docx
   B) .ppt
   C) .xls
   D) .accdb

3. What is the intersection of a row and a column in Excel called?

   A) Box
   B) Grid
   C) Cell
   D) Field

4. Which feature in Excel allows you to perform calculations quickly on data?

   A) Chart
   B) Table
   C) Formula
   D) Text Box

5. What is the vertical arrangement in an Excel spreadsheet called?

   A) Row
   B) Column
   C) Cell
   D) Grid

6. In Excel, what do we call a group of cells?

   A) Matrix
   B) Table
   C) Range
   D) Section

7. What tab is used to insert a chart in Excel?

   A) View
   B) Insert
   C) Data
   D) Layout

8. How do you create a new Excel workbook?

   A) File > New > Workbook
   B) Home > Insert > Workbook
   C) View > New > Workbook
   D) Insert > File

9. Which function in Excel is used for addition?

   A) =ADD
   B) =SUM
   C) =PLUS
   D) =TOTAL

10. Which tab contains formatting tools like font and alignment?

    A) File
    B) Review
    C) Home
    D) Data

11. What is the smallest unit in an Excel worksheet?

Past Papers Questions

1. First spreadsheet program for personal computer was VisiCalc.
2. VisiCalc is the oldest spreadsheet package.
3. Microsoft introduced a spreadsheet program called Multiplan in 1982.
4. Lotus 1-2-3 was a Spreadsheet.
5. Lotus 1-2-3 is a popular DOS based spreadsheet package.
6. Files created with Lotus 1-2-3 have extension 123.
7. The first version of Excel 1.0 was released in 1985 only for Macintosh.
8. First version of Microsoft Excel to run on Microsoft's new Windows operating system was released in 1987.
9. Excel 2.0 is the first version of Microsoft Excel to run on Microsoft's new Windows.
10. First 32-bit version of Microsoft Excel was Excel 95.
11. Excel 2021 is the latest version of Excel.
12. MS Excel is used to organize data.
13. Microsoft Excel is a powerful Spreadsheet package.
14. MS- EXCEL is based on WINDOWS.
15. In MS Excel no of rows 1,048,576. And 16,384 columns.
16. ROWS in excel are labelled as 1, 2, 3.
17. Columns in excel are labelled as A, B, C.
18. Excel uniquely identifies cells within a worksheet with a cell name Column letters and row numbers.
19. In excel row corresponds to cell.

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Microsoft PowerPoint (MS PowerPoint)

What is PowerPoint?

Overview

With PowerPoint on your PC, Mac, or mobile device, you can:

- Create presentations from scratch or a template.
- Add text, images, art, and videos.
- Select a professional design with PowerPoint Designer.
- Add transitions, animations, and cinematic motion.
- Save to OneDrive, to get to your presentations from your computer, tablet, or phone.
- Share your work and work with others, wherever they are.

Create a presentation in PowerPoint

Create presentations from scratch or start with a professionally designed, fully customizable template from Microsoft Create.

Tip: If you have Microsoft Copilot it can help you create a presentation, add slides or images, and more. To learn more see Create a new presentation with Copilot in PowerPoint.

Create a presentation

1. Open PowerPoint.
2. In the left pane, select **New**.
3. Select an option:
   - To create a presentation from scratch, select **Blank Presentation**.
   - To use a prepared design, select one of the templates.

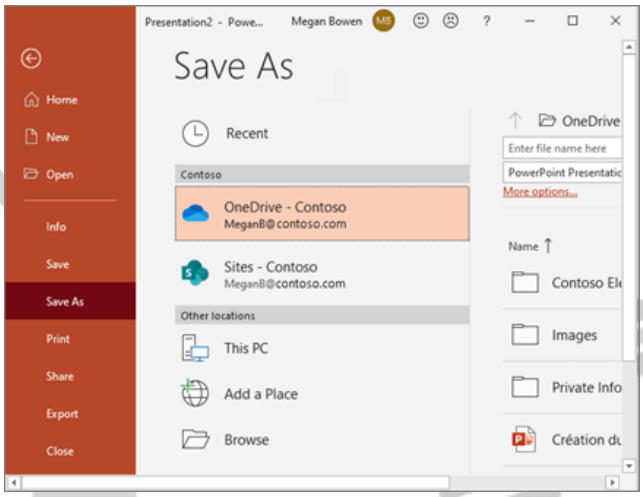
Save in PowerPoint

Save your presentation to OneDrive

When you save your files to the cloud, you can share and collaborate with others, and get to your files from anywhere - on your computer, tablet, or phone.

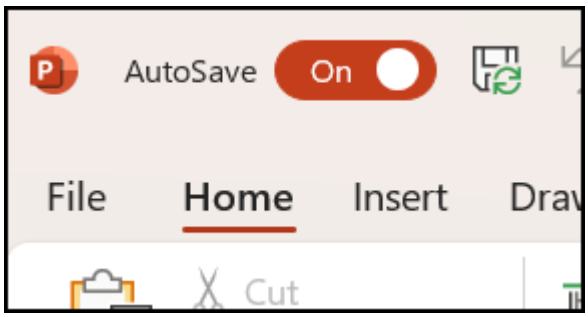
1. Select **File > Save As**.
2. Select **OneDrive**.

   Save personal files to **OneDrive - Personal**, and work files to your company OneDrive. You can also save to another location, like your device.



Offline

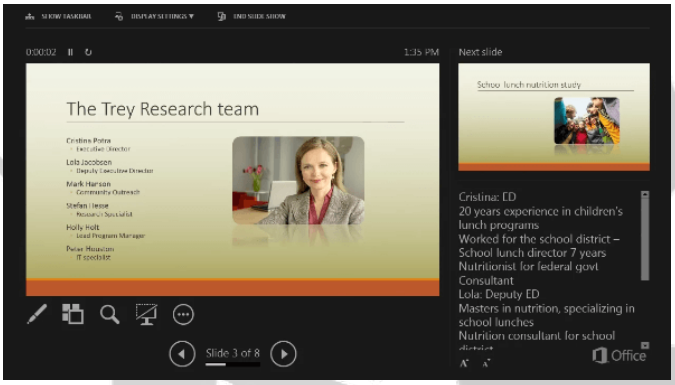
When you're online, AutoSave is always on and saves your changes as you work. If at any time you lose your Internet connection or turn it off, any pending changes will sync as soon as you're back online.



Give a presentation in PowerPoint

Start a presentation

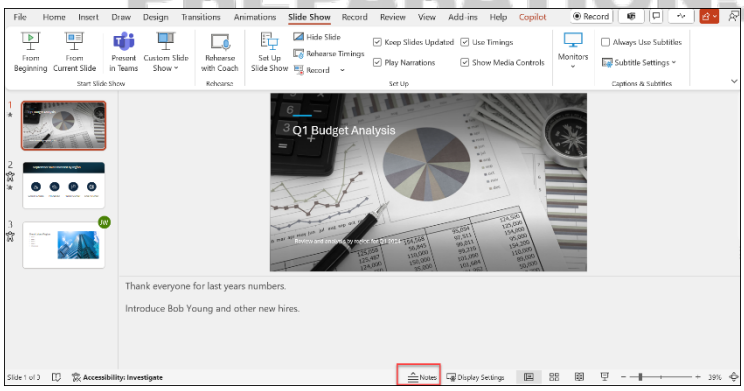
- On the **Slide Show** tab select **From Beginning**. Now, if you are working with PowerPoint on a single monitor and you want to display Presenter view, in **Slide Show** view, on the control bar at the bottom left select the three dots, and then **Show Presenter View**.
- To move to the previous or next slide, select **Previous** or **Next**.
- To view all the slides in your presentation, select **See all slides**.



Notes

During your presentation, the speaker notes are visible on your monitor, but aren't visible to the audience.

- The Notes pane is a box that appears below each slide. Tap it to add notes.



- If you don't see the Notes pane or it is completely minimized, click **Notes** on the task bar across the bottom of the PowerPoint window

Insert a picture into the slide master

If you want a picture to appear on every slide of a specific type in your PowerPoint template, add it to the slide master.

Insert a picture into the background

If you want a picture to appear as background without affecting all slides in a Master, change the background settings for the slide.

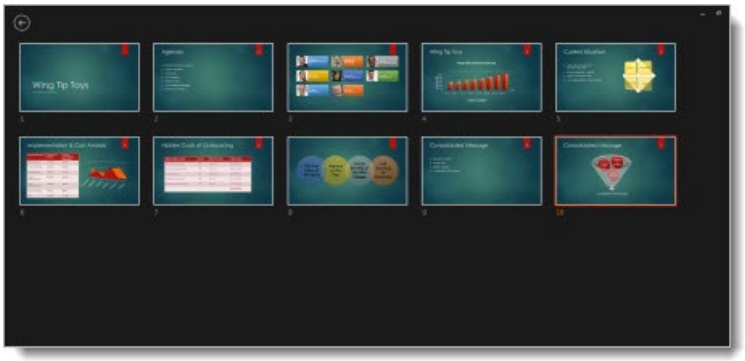
Add a background picture to your slides

Insert a background picture on a slide

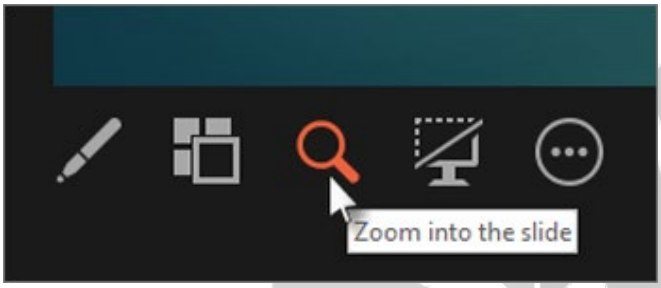
1. Right-click the margin of the slide and then select **Format Background**.
2. In the **Format Background** pane, choose **Picture or texture fill**.
3. Under **Picture source**, select **Insert**, and select where to get the picture from:

Option	Use it to
From a File	Insert a picture from your computer or network drive
Stock Images	Insert a picture from the stock image library
Online Pictures	Search the web for an image
From Icons	Insert a picture from the icon collection

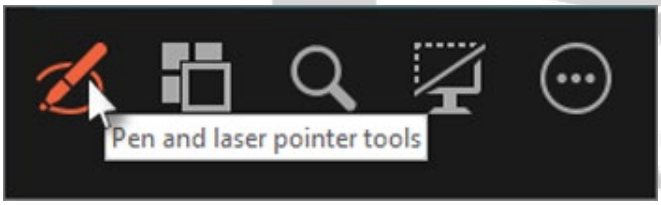
4. **Note:** To insert a picture using the **Clipboard** source option, you must copy a picture to the clipboard first. This option is unavailable if you haven't copied a picture.
5. To adjust the picture's relative lightness, slide the **Transparency** bar to the right.



- To view a detail in your slide up close, select **Zoom into slide**, and then point to the part you want to see.



- To point to or write on your slides as you present, select **Pen and laser pointer tools**.



Press the Esc key when you want to turn off the pen, laser pointer, or highlighter.

- To hide or unhide the current slide in your presentation, select **Black or unblack slide show**.

MCQ – MS PowerPoint

1. What feature allows text to automatically continue on a new line in a text box?

   A) Merge text
   B) Text overflow
   C) Text wrap
   D) Auto fit

2. How can you add slide numbers to all slides?

   A) View > Slide Number > Apply
   B) Insert > Header & Footer > Slide Number > Apply to All
   C) Design > Format > Slide Number
   D) File > Slide Info

3. Which option allows the date and time to update each time the presentation is opened?

   A) Fixed date
   B) Manual entry
   C) Update automatically
   D) Time format only

4. What is the smallest editable unit on a slide?

   A) Layout
   B) Text
   C) Shape
   D) Text Box

5. Which tab is used to insert a picture?

   A) Home
   B) Insert
   C) Design
   D) Format

6. Which of the following changes the text direction in a shape?

   A) Format > Rotate Text
   B) Insert > Text Direction
   C) Format Shape > Text Direction
   D) Home > Orientation

7. How do you insert a stock image in PowerPoint?

   A) Insert > Online Pictures
   B) Insert > Icons
   C) Insert > Stock Images
   D) Insert > Shapes

8. What does 'Shrink text on overflow' do?

   A) Cuts extra text
   B) Scrolls the text
   C) Reduces font size to fit in the shape
   D) Expands the shape

9. How do you access Presenter View?

   A) View > Normal > Presenter Tools
   B) Slide Show > From Beginning > Presenter View
   C) File > Presenter Settings
   D) Design > Show Presenter View

10. How can you change vertical alignment of text in a text box?

    A) Home > Align
    B) View > Text Settings
    C) Format Shape > Layout &

Past Papers Questions

1. Spell check in PowerPoint is F7.
2. Slide show shortcut key is F 5.
3. By using Shift + F5 short key, presentation starts from current slide.
4. Hyperlink in PowerPoint shortcut key is CTRL+K.
5. To insert a hyperlink in a slide (a) Choose insert > Hyperlink (b)Press Ctrl+ K.
6. Ctrl + Click each slide allow you to select more than one slide in a presentation.
7. To insert a new slide in power point presentation shortcut key is CTR +M.
8. To access directly font dialogue box in power point CTRL+T is used.
9. CTRL+P key to print PowerPoint presentation.
10. Shortcut key to next slide is SPACE.
11. In MS Powerpoint we can go to next slide by ENTER BUTTON, MOUSE, SPACEBAR.
12. Ctrl+Home is key used to come on first slide of presentation.
13. Ctrl+End is key used to come on last slide of presentation.
14. To open the existing presentation, press Ctrl +0.
15. Press Escape you can stop a slide show.
16. To Print the PowerPoint presentation, press Ctrl +P.
17. To start slide show to a presentation (a) Hit F5 key (b) From Slide Show menu choose View Show option.
18. Robert Gaskins is the creator of PowerPoint.
19. PowerPoint exe command is used to open PowerPoint file.

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KEYBOARD AND SHORTCUT KEYS

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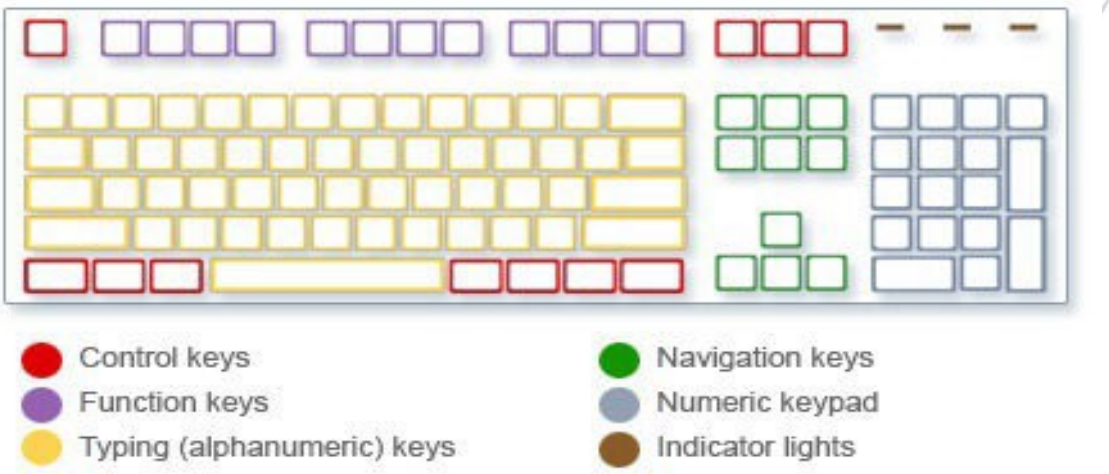
Key-Board and Shortcut Keys

What is KEYBOARD?

- A panel/plate/board of keys that operates a computer or typewriters.
- A piece of computer hardware used to input text, characters, and other commands into a computer or similar device



Types of Keys Setup on Keyboard:

Keyboard Shortcut keys:

1. **Set of one or more keys that generates a particular command to be executed.**
2. Generally executed by using **Alt or Ctrl keys** with some other keys
3. A **plus (+) sign** between two or more keys indicates that these keys should pressed in combination. For example Ctrl+Shift+A means to press

Microsoft Power Point Shortcut Keys

Shortcut Keys	Operation
12	Save As.
Alt + F4	Close PowerPoint
Ctrl + M	Insert a new slide.
Ctrl + D	Duplicate the selected slide.
Ctrl + Shift + D	Duplicate the selected slide.
Page Up/Down	Navigate to the previous/next slide
Ctrl + G	Group objects.
Ctrl + Spacebar	Reset manual character formatting
Shift + F3	Change the case of selected text.
Alt + Q	"Tell me what you want to do".
Ctrl + T	Open the Font window.
Ctrl + K	Insert a hyperlink.
Ctrl + Tab	Switch between open presentations.
Alt + F9	Show/hide gridlines and guides
Alt + F10	Show/hide selection pane.

Special Computer Shortcut Keys:

Shortcut Keys	Operation
Home	Move to the begging of the line
Ctrl + End	Move to the last character
Ctrl + Home	Move to the first character
Ctrl + Right Arrow	To move the insertion point to the begging of the next word
Ctrl + Left Arrow	To move the insertion point to the begging of the Previous word
Ctrl + Up Arrow	To move the insertion point to the begging of the next paragraph
Ctrl + Down Arrow	To move the insertion point to the begging of the Previous paragraph
Ctrl + Del	Cut selected item
Ctrl + Esc	Display the start menu

Windows Shortcut Keys:

Shortcut Keys	Operation
Win	Display or hide the start menu
Win + B	Set focus in the notification area
Win + D	Show or hide desktop area
Win + E	Open file explorer
Win + H	Open the share charm (voice command)
Win + I	Open the settings
Win + K	Open the devices charm (nearby device sharing)
Win + L	Lock your computer (Windows Xp and later)

MCQ– Keyboard & Shortcut Keys

1. What does the "Ctrl + C" shortcut do?

   A) Cut selected item
   B) Copy selected item
   C) Close the window
   D) Paste copied item

2. What is the function of the "Alt + F4" shortcut?

   A) Refresh the page
   B) Open a new document
   C) Close the current program
   D) Save the file

3. What does the "Ctrl + A" command do in most programs?

   A) Cut all
   B) Undo all
   C) Select all content
   D) Save all

4. Which key is used to cancel the current operation?

   A) Enter
   B) Ctrl
   C) Escape (Esc)
   D) Tab

5. What does "Ctrl + P" do in most applications?

   A) Print the document
   B) Paste the text
   C) Power off
   D) Preview the slide

6. What is the use of "Shift + F3" in MS Word?

   A) Search
   B) Change case of selected text
   C) Insert formula
   D) Exit program

7. What does the "Ctrl + Z" shortcut do?

   A) Redo the action
   B) Cut the item
   C) Undo the last action
   D) Zoom out

8. What happens when you press "Ctrl + X"?

   A) Select all
   B) Paste item
   C) Cut selected item
   D) Cancel action

9. What is the result of pressing "Ctrl + V"?

   A) View menu
   B) Paste copied content
   C) Print file
   D) Save

10. What does "Win + L" do?

    A) Log in
    B) Lock the computer
    C) Launch program
    D) List files

11. Which shortcut is used to open the Run dialog box?

    A) Ctrl + R
    B) Win + R

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Computer Language

What is a Computer Language?

A **computer language** is a system of communication used to give instructions to a computer. These instructions help the computer perform tasks such as calculations, data processing, website creation, game development, and much more.

Definition:

A computer language is a formal language consisting of symbols, syntax, and semantics that instruct a computer to carry out specific tasks.

Purpose of Computer Languages:

- To create software, applications, and games
- To control the behavior of computers and electronic devices
- To allow communication between the user and the hardware
- To store, retrieve, and manipulate data
- To build and maintain websites, databases, and AI systems

Real-Life Examples:

- Using Python to create a weather app
- Writing HTML and CSS to design a school website
- Using SQL to manage student records in a database

Basic Categories of Computer Languages:

- **Programming Languages** (e.g., Python, Java, C++) – for software development
- **Markup Languages** (e.g., HTML, XML) – for webpage structure
- **Query Languages** (e.g., SQL) – for database access
- **Scripting Languages** (e.g., JavaScript, Bash) – for automation and dynamic content

Importance of Computer Languages

Computer languages are the building blocks of technology. Without them, we would not have computers, apps, or the internet. Their importance spans education, healthcare, entertainment, communication, science, and more.

How Compilers Work:

1. The entire source code is written and saved.
2. The compiler processes the whole code.
3. It identifies and reports all errors in one go.
4. If there are no errors, it creates an executable file.

Examples of Compiled Languages:

- C
- C++
- Java (compiled to bytecode, then run by a virtual machine)
- Go

Advantages of Compilers:

- Faster execution once compiled
- Provides better optimization of code for performance
- Suitable for large, complex programs

Disadvantages:

- Slower to test code changes (requires full recompilation)
- More difficult to debug during early development

Comparison Table:

Feature	Interpreter	Compiler
Execution Style	Line-by-line	Whole program at once
Output	Executes directly	Produces a separate executable file
Speed	Slower	Faster (after compilation)
Error Handling	Stops at first error	Detects all errors in one pass
Usage	Learning, scripting, quick testing	Application development, production
Examples	Python, JavaScript, Ruby	C, C++, Java, Go

Which One Should You Use?

- Choose an **interpreter** if you want quick results and easier debugging.
- Choose a **compiler** if you need performance, standalone applications, or complex software development.

Term	Definition
Code	A set of instructions written in a programming language to perform a task
Syntax	The set of rules that define how a program must be written to be valid
Variable	A named container that stores data used in programs
Loop	A sequence that repeats instructions multiple times until a condition is met
Function	A reusable block of code that performs a specific task
Compiler	A translator that converts entire programs into machine code before execution
Interpreter	A translator that reads and executes code line-by-line
Assembler	Converts assembly language into machine code
Debugging	Identifying and removing errors or bugs in code
Binary	A numeric system using only 0 and 1, which computers use to operate
IDE (Integrated Development Environment)	Software used to write, test, and debug programs (e.g., VS Code)
Source Code	The original code written by a programmer before translation
Executable File	A file generated by a compiler that runs as a program (e.g., .exe)
Algorithm	A logical sequence of steps to solve a problem
Pseudocode	A simplified version of code written in plain language to plan before actual coding

MCQ – Computer Languages

1. What is a computer language?

   A) A device for storing files
   B) A communication tool between people
   C) A system of communication to instruct a computer
   D) A way to play games on computers

2. Which of the following is a purpose of computer languages?

   A) Watching movies
   B) Playing music
   C) Building and maintaining websites
   D) Cleaning computer hardware

3. HTML is an example of which type of computer language?

   A) Programming Language
   B) Query Language
   C) Scripting Language
   D) Markup Language

4. SQL is mainly used for:

   A) Animating websites
   B) Database access
   C) Editing images
   D) Typing text

5. Which of the following is a high-level programming language?

   A) MOV
   B) 10101100
   C) Python
   D) HTML

6. Which language is closest to the machine?

   A) Java
   B) Assembly Language
   C) HTML
   D) Machine Language

7. Assembly language uses:

   A) Real numbers
   B) Keywords
   C) Mnemonics
   D) Functions

8. Which of the following is NOT a programming language?

   A) Python
   B) Java
   C) SQL
   D) BIOS

9. Which tool translates the whole program into machine code at once?

   A) Interpreter
   B) Debugger
   C) Compiler
   D) Assembler

10. What does an interpreter do?

    A) Translates code line-by-line
    B) Converts binary to text
    C) Creates machine hardware
    D) Compresses code

11. Which of the following is an interpreted language?

    A) C++
    B) Java

Past Papers Questions

1. The UNIX operating system is written in the C-language.
2. COBOL is widely used in Commercial applications.
3. FOX PRO is a programming language.
4. JAMES GOSLING invented the JAVA language.
5. C language is developed by Dennis M. Ritchie.
6. BASIC language is easiest to learn.
7. BASIC is a Procedural language.
8. FORTRAN earliest language.
9. Software is represented from high level to low level in C++, COBOL, and JAVA.
10. .NET is Microsoft's latest entry in to the programming arena.
11. Programming language built into user programs such as Word and Excel are known as Visual programming languages.

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Programing and Program Language

What is a Programming Language?

A **programming language** is a formal set of instructions and syntax that allows humans to communicate with computers and control their behavior. These languages are used to write software, applications, scripts, websites, and more.

Definition:

A programming language is a set of rules that defines how to write instructions for a computer to perform specific tasks.

Why Programming Languages Matter:

- Provide a bridge between human logic and machine operations
- Allow the creation of everything from mobile apps to smart devices
- Enable problem-solving and algorithmic thinking

Common Syntax Components:

- **Keywords:** Reserved words like if, while, function
- **Operators:** Symbols like +, -, =, ==
- **Data Types:** String, Integer, Boolean, etc.
- **Control Structures:** if, else, loop, switch

History and Evolution of Programming Languages

The development of programming languages has followed the advancement of computer science:

First Generation (1940s): Machine Language

- Only 0s and 1s
- Directly executed by the CPU
- Difficult and error-prone

Second Generation (1950s): Assembly Language

- Mnemonics like MOV A, B

Types of Programming Languages

Programming languages can be categorized by abstraction level and purpose:

Category	Description	Examples
Low-Level	Operates close to hardware; hard to write	Assembly, Machine Code
High-Level	Easier to read, write, and maintain	Python, Java, C++
Procedural	Organized as step-by-step commands	C, Pascal, BASIC
Object-Oriented	Focuses on reusable objects and classes	Java, C#, Python
Scripting	Automates tasks or interacts with software	JavaScript, Shell, Perl
Markup	Describes data structure and presentation	HTML, XML
Query	Used to access and manipulate data	SQL, SPARQL

Popular Programming Languages and Their Applications

Language	Type	Common Uses	Features
Python	Interpreted, OOP	AI, web, scripting	Easy syntax, vast libraries
Java	Compiled, OOP	Enterprise, Android	Portable (JVM), strong typing
C++	Compiled	Games, system tools	High-performance, control
JavaScript	Interpreted	Web interactivity	Runs in browser, dynamic
C#	Compiled, OOP	Windows, games	Microsoft ecosystem, Unity
Swift	Compiled	iOS/macOS apps	Secure, fast, modern syntax
Kotlin	Compiled	Android apps	Interoperable with Java
PHP	Interpreted	Web servers	Easy server-side scripting

MCQ – Programming and Programming Languages

1. What is a programming language?
   A) A way to play computer games
   B) A formal way to tell computers what to do
   C) A tool for watching videos
   D) A language used to speak to humans

2. Programming languages are used to:
   A) Wash dishes
   B) Water plants
   C) Write software and control machines
   D) Cook food

3. Which of these is a syntax component?
   A) Monitor
   B) Keyword
   C) Mouse
   D) Printer

4. Which keyword is commonly used in programming?
   A) blue
   B) if
   C) window
   D) table

5. The '+' symbol in programming is known as:
   A) Keyword
   B) Loop
   C) Operator
   D) Class

6. What is a Boolean data type used for?
   A) Storing images
   B) Storing true or false values
   C) Making music
   D) Drawing graphics

7. Machine language uses:
   A) English sentences
   B) Mnemonics
   C) Binary digits
   D) Visual blocks

8. Assembly language uses:
   A) Photos
   B) Graphs
   C) Mnemonics
   D) Colors

9. FORTRAN and COBOL are examples of:
   A) First generation languages
   B) Second generation languages
   C) Third generation languages
   D) Fifth generation languages

10. C++ and Java are examples of:
    A) Assembly language
    B) First generation languages
    C) Structured/OOP languages
    D) Markup languages

11. Which generation includes Python and Swift?
    A) First
    B) Second
    C) Fourth
    D) Fifth

12. Which of the following is a scripting language?
    A) C++
    B) JavaScript
    C) Assembly
    D) SQL

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Entrepreneurship

What is Entrepreneurship?

Entrepreneurship is the foundation of innovation and modern business. It involves identifying opportunities, gathering resources, taking risks, and launching ventures that provide value to society.

Definition:

Entrepreneurship is the dynamic process of vision, change, and creation that requires an application of energy and passion toward the creation and implementation of new ideas and creative solutions.

Key Activities in Entrepreneurship:

- Recognizing market gaps and customer needs
- Designing a viable business model
- Organizing resources (finance, people, tools)
- Launching a product/service
- Scaling the business

Example: A university student in Lahore creates an app that connects home tutors with students in real-time. They later scale it nationally by partnering with ed-tech investors.

Importance of Entrepreneurship

Entrepreneurship is a major engine of economic development and societal progress.

Economic Contributions:

- In Pakistan, SMEs (mostly entrepreneurial) contribute over **40% of GDP** and employ **78% of the non-agricultural labor force**.
- In the U.S., startups create **3 million jobs annually**.

Why Entrepreneurship Matters:

- **Job Creation:** Startups often become large employers (e.g., Careem, started with 2 employees, now thousands).

Corporate Entrepreneurship	New business units within large firms	Jazz creating fintech arm (JazzCash)
Digital Entrepreneurship	Internet-based business models	Instagram shop, YouTube channel
AgriTech Entrepreneurship	Combines farming and tech	Pak Agri Market (info for farmers)
Green Entrepreneurship	Environmentally sustainable startups	Daastan (eco-publications, green model)

Key Terminology Related to Entrepreneurship

Term	Definition
MVP (Minimum Viable Product)	Basic version of a product to test with real users
Bootstrapping	Starting a business without external funding
Unicorn	Startup valued at over $1 billion (e.g., Careem before Uber acquisition)
Incubator	Institution that supports early-stage startups with space and mentoring
Pivot	Changing business direction based on feedback or failure
Burn Rate	Speed at which a startup spends its capital
Exit Strategy	Plan for founders/investors to sell ownership (IPO or acquisition)
Crowdfunding	Raising small amounts from many individuals via online platforms
Co-founder	Person who joins another in starting a business

Introduction to E-Commerce

E-commerce is now a pillar of the global economy. In 2023, global e-commerce sales exceeded **$6.3 trillion**.

MCQ – Entrepreneurship

1. What is entrepreneurship?
   A) A cooking style
   B) Government employment
   C) Process of creating and running new businesses
   D) A form of entertainment

2. Which of the following is a key activity in entrepreneurship?
   A) Watching TV
   B) Organizing a picnic
   C) Recognizing market gaps
   D) Playing games

3. Launching a product or service is a part of:
   A) Shopping
   B) Entrepreneurship
   C) Marketing only
   D) Banking

4. SMEs contribute what percent to Pakistan's GDP?
   A) 10%
   B) 20%
   C) 40%
   D) 80%

5. How many jobs do U.S. startups create annually?
   A) 300,000
   B) 3 million
   C) 1 million
   D) 10 million

6. What does Careem's growth demonstrate?
   A) Corporate taxes
   B) Slow business development
   C) Job creation by startups
   D) Interest rates

7. Sehat Kahani is an example of:
   A) Government agency
   B) School
   C) Social startup providing healthcare
   D) Food delivery app

8. Which skill is crucial for a successful entrepreneur?
   A) Sleeping skills
   B) Visionary thinking
   C) Laziness
   D) Avoiding technology

9. What does financial literacy include?
   A) Writing novels
   B) Memorizing poems
   C) Budgeting and fundraising knowledge
   D) Grammar rules

10. A strong entrepreneur must be:
    A) Shy and isolated
    B) Careless with money
    C) Resilient and adaptable
    D) Against teamwork

11. What is bootstrapping?
    A) Importing boots
    B) Starting a business without external funding
    C) Repairing shoes
    D) Hiring a manager

12. What is an MVP in entrepreneurship?
    A) Most valuable person
    B) Minimum Viable Product
    C) Manual venture process
    D) Market viewing platform

13. What does an incubator provide?
    A) Game consoles

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CYBER SECURITY

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Cybersecurity

What is Cybersecurity?

Cybersecurity is the practice of protecting digital systems, networks, devices, and data from malicious attacks. These attacks aim to steal, damage, or manipulate sensitive information and disrupt digital operations.

Definition: Cybersecurity is the combination of tools, policies, techniques, and best practices that ensure the safety of internet-connected systems and the data they process.

Examples of what cybersecurity protects:

- Your passwords and login information
- Bank account and credit card data
- Social media accounts
- Educational platforms (e.g., LMS, Zoom, Google Classroom)
- Government and health databases

Without cybersecurity, we risk:

- Identity theft
- Data leaks
- Financial fraud
- Reputation loss
- Even national security threats

Why Cybersecurity Matters Today

We live in a **hyperconnected digital world** — every click, post, or email involves data exchange. Protecting that data is no longer optional.

Key Reasons Cybersecurity is Essential:

1. **Online Threats Are Increasing:** Cyberattacks occur every 39 seconds.
2. **Remote Learning & Work:** Cloud systems are vulnerable if not secured.
3. **Digital Economy:** Online banking, e-commerce, and e-wallets need protection.

4. **IoT Devices:** From smartwatches to home appliances, everything is connected.
5. **National & Military Security:** Countries face cyberwarfare and hacking threats.

Fact: In 2024, Pakistan's largest telecom suffered a massive data breach affecting over 2 million users.

Evolution and History of Cybersecurity

Timeline of Cybersecurity Milestones:

- **1971:** First known computer virus, "Creeper"
- **1986:** First documented case of hacking by "The 414s"
- **1990s:** Rise of commercial internet → phishing, worms, and Trojans appear
- **2000s:** Introduction of firewalls, antivirus software, encryption tools
- **2017:** Global WannaCry ransomware attack cripples UK hospitals
- **2020–2025:** AI-driven threats, state-sponsored hacking, and deepfakes emerge

Cybersecurity has evolved from just "protecting computers" to guarding **networks, devices, identities, national defense**, and even **democracy**.

Types of Cyber Threats and Attacks

Cyberattacks come in various forms. Here are the most common and dangerous ones:

Type	How it Works	Example
Malware	Malicious software that infects devices	Trojans, worms, keyloggers
Ransomware	Locks files and demands payment	WannaCry, CryptoLocker
Phishing	Tricks you into revealing info	Fake bank or university emails
Spyware	Secretly monitors your actions	Keylogging programs
DDoS	Overloads and shuts down websites	Website goes offline unexpectedly

MCQ – Cybersecurity

1. What is the primary goal of cybersecurity?

   A) Increasing internet speed
   B) Protecting digital systems and data
   C) Printing documents
   D) Developing games

2. Which of the following is an example of what cybersecurity protects?

   A) Your calendar colors
   B) Social media accounts
   C) Desk decorations
   D) Weather updates

3. What is identity theft?

   A) Forgetting your name
   B) Stealing someone's online identity
   C) Creating passwords
   D) Using emojis

4. Cyberattacks are increasing because:

   A) People watch TV more
   B) There are more connected devices
   C) Passwords are too short
   D) Browsers are colorful

5. Which of the following is a cyberattack?

   A) Shaking hands
   B) Sending malware to someone's computer
   C) Installing updates
   D) Writing a diary

6. The first known computer virus was:

   A) ILOVEYOU
   B) Creeper
   C) Trojan
   D) CryptoLocker

7. What is ransomware designed to do?

   A) Update files
   B) Lock files and demand payment
   C) Organize folders
   D) Scan documents

8. What is phishing?

   A) A water sport
   B) Trick to gain personal information
   C) Catching fish
   D) Website designing

9. What does DDoS stand for?

   A) Direct Download on Server
   B) Distributed Denial of Service
   C) Double Data Operations System
   D) Data Distribution on Site

10. What is the purpose of the CIA Triad?

    A) Intelligence gathering
    B) Protecting data through confidentiality, integrity, and availability
    C) Military mission
    D) Encrypting social media

Past Paper Questions

1. E-mail hacking means Illegal access to open email accounts or others.
2. Unauthorized and illegal accessing of computer program, often with criminal intent is Hacking.
3. Firewall in a computer to protect a network server from damage by these who log into.
4. Firewall's main purpose is to prohibit unauthorized access to your computer via the internet.
5. Any crime that involves a computer and internet is called cybercrime.
6. Encryption is to protect data and passwords.
7. The prevention of electronic crimes Act was passed in Pakistan in the year 2016.
8. WPA2 is used for security in WI-FI.
9. HTML viruses infect a Web page in the HTML code.
10. Cyber security is related to security of computer, network, and software.
11. A self-replicating program, similar to a virus, which was taken from a 1970s science fiction novel by John Bruner entitled the Shockwave Rider, is Worm.
12. A virus that replicates itself called Worm.
13. The thing that eventually terminates a worm virus is a lack of memory or disk space.
14. A result of a computer virus cannot lead to Mother Board Crash.
15. The majority of computer crimes are committed by Insiders.
16. An intentionally disruptive program that spreads from program to program or from disk to disk is known as a virus.
17. Malicious software is known as Malware.
18. Malware, short for Malicious Software, is an umbrella term used to refer to a variety of forms of hostile or intrusive software, including computer viruses, worms, Trojan horses, ransomware, spyware, adware. Scareware, and other malicious programs.
19. In 1999, the Melissa virus was a widely publicized e-mail virus.
20. Biometrics is the measurement of things such as fingerprints and retinal scans used for security access.

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DIGITAL ETHICS

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Digital Ethics

What is Computer Ethics?

Computer ethics refers to the moral principles and rules that guide how we use computers and the internet.

Definition: Computer ethics is the responsible, fair, and respectful use of technology, with attention to privacy, legality, honesty, and accountability.

Examples of Ethical vs. Unethical Behavior:

Ethical	Unethical
Giving credit when using online resources	Copying and pasting content without credit
Reporting a discovered vulnerability	Exploiting or selling security loopholes
Respecting others' privacy	Snooping through messages or emails
Using licensed software	Downloading pirated software

"With great power comes great responsibility" — this is especially true online.

Ethical vs. Unethical Behavior Online

Ethical Behavior:

- Respecting others' digital content and identity
- Practicing fair use of media and code
- Engaging in healthy, supportive online dialogue
- Protecting others' personal data

Unethical Behavior:

- Cyberbullying and harassment
- Plagiarizing code or research
- Spreading false information or rumors
- Bypassing school or exam rules using tech

MCQ – Digital Ethics

1. What does computer ethics focus on?

   A) Faster hardware
   B) Responsible and fair use of technology
   C) Downloading free software
   D) High-speed gaming

2. Which of these is an example of ethical behavior?

   A) Copying someone's code without permission
   B) Giving credit when using content
   C) Hacking into school systems
   D) Sharing pirated movies

3. What is unethical in the digital world?

   A) Logging out after use
   B) Respecting privacy
   C) Cyberbullying
   D) Citing sources

4. Using licensed software is considered:

   A) Expensive behavior
   B) Ethical
   C) Illegal
   D) Time-wasting

5. What does the quote "With great power comes great responsibility" mean in the digital world?

   A) Use technology only at school
   B) Share as much content as possible
   C) Use technology wisely and respectfully
   D) Sell software online

6. Which student acted ethically?

   A) Student B who copied code from StackOverflow
   B) Student A who understood and wrote his own code
   C) Student B who sold code
   D) None

7. What does copyright protect?

   A) Computer speed
   B) Original works of authorship
   C) Internet connection
   D) Hardware devices

8. Which right protects brand names and logos?

   A) Patent
   B) Copyright
   C) Trademark
   D) Licensing

9. A patent is used to protect:

   A) Songs and lyrics
   B) Inventions and designs
   C) Logos only
   D) Data backups

10. Creative Commons licenses allow:

    A) Plagiarism of content
    B) Unlimited use without rules
    C) Use with certain conditions
    D) No public sharing

11. Why should we give credit when

More Past Papers Questions

1. Disk scanner is used to detect physical and logical problems of a disk.
2. Fax viewer is a utility program.
3. Window media player is an example of entertainment software.
4. Entertainment is not a system software.
5. WinZip program compress large files into smaller file.
6. Oracle is not anti-virus software.
7. Computer hard disk was first introduced by IBM.
8. LAN card is not necessary for working of a standalone computer.
9. CRT (Cathode Ray Tube) technology is used in Monitor.
10. Data stored on a hard disk can also be saved on CD, Floppy Disk and magnetic tape.
11. LINUX is an open source operating system.
12. Creator of LINUX is Linus Torvalds.
13. UNIX was made by Dennis Ritchie and Ken Thompson.
14. Real time OS time intervals to process and responds to input is very small.
15. Real time system is the name of the operating system that reads and reacts in terms of actual time.
16. BCC means Blind Carbon Copy, whereas CC means Carbon Copy.
17. Log In can be used to open your account.
18. If you want to close your email account, you should click on Sign out.

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