COMPUTER

Computer Basics & Full forms

For students preparing for MAH-B.BCA/BBA/BMS/BBM CET 2025 and CUET General Test Paper 3 for admission to BCA, BBA, BMS, BBM

Full Forms List

- ASCII: American Standard Code for Information Interchange
- API: Application Program Interface
- ACL: Access Control List
- ANSI: American National Standards Institute
- ADC: Analog-to-Digital Converter
- ADF: Automatic Document Feeder
- ADSL: Asymmetric Digital Subscriber Line
- AGP: Accelerated Graphics Port
- AIFF: Audio Interchange File Format
- AIX: Advanced Interactive Executive
- ARP: Address Resolution Protocol
- ASP: Active Server Pages
- ATA: Advanced Technology Attachment
- ATM: Asynchronous Transfer Mode
- BASIC: Beginner's All-purpose Symbolic Instruction Code
- BCC: Blind Carbon Copy
- BIOS: Basic Input/Output System
- BPS: Bits Per Second
- COBOL - Common business oriented language
- CISC: Complex Instruction Set Computing
- CD-R: Compact Disc Recordable
- CAD: Computer-Aided Design
- CCD: Charged Coupled Device
- CDMA: Code Division Multiple Access
- CGI: Common Gateway Interface
- CMOS: Complementary Metal Oxide Semiconductor
- CMYK: Cyan Magenta Yellow Black
- CRC: Cyclic redundancy check
- CSS: Cascading Style Sheet
- DAC: Digital-to-Analog Converter
- DIL: Dynamic Link Library
- DOS - Disk Operating System
- DMA: Direct Memory Access
- DNS: Domain Name System
- DPI: Dots Per Inch
- DRAM: Dynamic Random Access Memory
- DRM: Digital Rights Management
- DSL: Digital Subscriber Line
- DSLAM: Digital Subscriber Line Access Multiplexer
- DTD: Document Type Definition
- DVI: Digital Video Interface
- DBMS: Database Management System
- DDL: Data Definition Language
- DDR: Double Data Rate
- DDR2: Double Data Rate 2
- DHCP: Dynamic Host Configuration Protocol
- DIMM: Dual In-Line Memory Module
- ECC: Error Correction Code
- EDI: Electronic Data Interchange
- EPS: Encapsulated PostScript
- EUP: Enterprise Unified Process
- FAT: File Allocation Table

- FIFO: First In, First Out
- FiOS: Fiber Optic Service
- FLOPS: Floating Point Operations Per Second
- FPU: Floating Point Unit
- FSB: frontside bus
- FTP: File Transfer Protocol
- GUID: Globally Unique Identifier
- GIF: Graphics Interchange Format
- GIGO: Garbage In, Garbage Out
- GIS: Geographic Information Systems
- GPS: Global Positioning System
- GPU: Graphics Processing Unit
- GUI: Graphical User Interface
- HDMI: High-Definition Multimedia Interface
- HFS: Hierarchical File System
- HSF: Heat Sink and Fan
- HDD – Hard Disk Drive
- HTML: Hyper-Text Markup Language
- HTTP: HyperText Transfer Protocol
- HTTPS: HyperText Transport Protocol Secure
- IMAP: Internet Message Access Protocol
- IACNN: Internet Corporation For Assigned Names and Numbers
- IPX: Internetwork Packet Exchange
- ICF: Internet Connection Firewall
- ICMP: Internet Control Message Protocol
- IRC: Internet Relay Chat
- ICS: Internet Connection Sharing
- IDE: Integrated Device Electronics
- IEEE: Institute of Electrical and Electronics Engineers
- IRQ: Interrupt Request
- IGP: Integrated Graphics Processor
- ISA: Industry Standard Architecture
- ISCSI: Internet Small Computer Systems Interface
- ISDN: Integrated Services Digital Network
- ISO: International Organization for Standardization
- IVR: Interactive Voice Response
- JPEG: Joint Photographic Experts Group
- JRE: Java Runtime Environment
- JSP: Java Server Page
- LAN: Local Area Network
- LCD: Liquid Crystal Display
- LDAP: Lightweight Directory Access Protocol
- LIFO: Last In, First Out
- LUN: Logical Unit Number
- LPI: Lines Per Inch
- MANET: Mobile Ad Hoc Network
- MIDI: Musical Instrument Digital Interface
- MIPS: Million Instructions Per Second
- MODEM: Modulator/Demodulator
- MOODLE: Modular Object-Oriented Dynamic Learning Environment
- MP3:MPEG-1 Audio Layer-3
- MPEG: Moving Picture Experts Group
- MTU: Maximum Transmission Unit
- MY SQL: My Sequel (SQL: structure query language)
- NAS: Network Attached Storage
- NAT: Network Address Translation
- NetBIOS: Network Basic Input/Output System
- NIC: Network Interface Card
- NNTP: Network News Transfer Protocol
- NOC: Network Operations Center
- NTFS: New Technology File System
- OASIS: Organization for the Advancement of Structured Information Standards
- OSI - Open Systems Interconnection
- OCR: Optical Character Recognition
- ODBC: Open Database Connectivity
- OEM: Original Equipment Manufacturer
- OLAP: Online Analytical Processing
- OOP: Object-Oriented Programming
- OpenGL: Open Graphics Library

- PPTP: Point-to-Point Tunneling Protocol
- PRAM: Parameter Random Access Memory
- P2P: Peer to Peer
- PCB: Printed Circuit Board
- PCI-X: Peripheral Component Interconnect Extended
- PCMCIA: Personal Computer Memory Card International Association
- PDF: Portable Document Format
- PDL: Page Description Language
- PHP: Hypertext Preprocessor
- PMU: Power Management Unit
- PPGA: Plastic Pin Grid Array
- PPI: Pixels Per Inch
- PPL: Point to Point Protocol.
- PNG: Portable Network Graphic
- QBE: Query By Example
- RISC: Reduced Instruction Set Computing
- RAID: Redundant Array of Independent Disks
- RDF: Resource Description Framework
- RDRAM: Rambus Dynamic Random Access Memory
- RGB: Red Green Blue
- RPC: Remote Procedure Call
- RTE: Runtime Environment
- RTF: Rich Text Format
- RUP: Rational Unified Process
- SAN: Storage Area Network
- SEO: Search Engine Optimization
- SATA: Serial Advanced Technology Attachment
- SCSI: Small Computer System Interface
- SD: Secure Digital
- SDRAM: Synchronous Dynamic Random Access Memory
- SDSL: Symmetric Digital Subscriber Line
- SERP: Search Engine Results Page
- SKU: Stock Keeping Unit
- SLI: Scalable Link Interface
- SMART: Self-Monitoring Analysis And Reporting Technology
- SNMP: Simple Network Management Protocol
- SOA: Service Oriented Architecture
- SOAP: Simple Object Access Protocol
- SRAM: Static Random Access Memory
- SSH: Secure Shell
- SSID: Service Set Identifier
- SSL: Secure Sockets Layer
- TFT: Thin Film Transistor
- TIFF: Tagged Image File Format
- TCP/IP: Transmission Control Protocol/Internet Protocol
- UDDI: Universal Description Discovery and Integration
- UDP: User Datagram Protocol.
- UML: Unified Modeling Language
- UNC: Universal Naming Convention
- UPnP: Universal Plug and Play
- UPS: Uninterruptible Power Supply
- URI: Uniform Resource Identifier
- URL: Uniform Resource Locator
- USB: Universal Serial Bus
- VCI: Virtual Channel Identifier
- VFAT: Virtual File Allocation Table
- VGA: Video Graphics Array
- VESA: Video Electronics Standards Association
- VLB: Virtual Learning Environment
- VoIP: Voice Over Internet Protocol
- VPI: Virtual Path Identifier."
- VPN: Virtual Private Network
- VRAM: Video Random Access Memory
- VRML: Virtual Reality Modeling Language
- WAIS: Wide Area Information Server."
- WAN: Wide Area Network.
- WEP: Wired Equivalent Privacy
- WiFi: Wireless Fidelity
- WPA: Wi-Fi Protected Access

- WYSIWYG: What You See Is What You Get
- WWW - World Wide Web
- XHTML: Extensible Hypertext Markup Language
- XML: Extensible Markup Language
- XSLT: Extensible Style Sheet Language Transformation
- Y2K: Year 2000

Generation of Computer:

1st Generation (1940 - 1958)	Vaccum Tube
2nd Generation (1959 - 1964)	Transistors
3rd Generation (1965-1970)	I.C (integrated circuit)
4th Generation (1971)	LSI(Large Scale integration), VLSI(Very large scale integration) ULSI (Ultra large scale integration)

Generation of computer: (Software)

1st Generation (1946-1958)	Machine Language
2nd Generation (1959- 1964)	Assembly Language
3rd Generation (1965-1970)	High Level Language
4th Generation (1971)	SQL (Structured query language)

Domain Types

- .com - Commercial and for profit organization
- .edu - Educational provider, college, Universities
- .gov - Government agencies
- .Mil - US military sites
- .net - Internet infrastructure and service providers
- .org - Miscellaneous and Non-profit organisations.

File Extension

- Bitmap image file - .bmp
- Bitmap graphics (Joint Photography Experts Group) - .jpg
- Zip file - .zip
- Extensible Markup Language file - .xml
- Uniform Resource Locator file - .url
- Language text file -.txt
- Java Server Page file - .jsp
- JavaScript code file - .js
- Java language file – java
- Hypertext markup language file - .html
- C++ language file - .cpp
- C language file - .c
- Word file - .doc or .docx
- Excel file - .xls or .xlsx
- PowerPoint file - .pptx

- 4 bit = 1nibble
- 8 bit = 1 byte
- 1024 byte = 1 Kilo byte
- 1024 Kilo byte = 1 Mega byte
- 1024 Mega byte = 1 Giga byte
- 1024 Giga byte = 1 Tera byte
- 1024 Tera byte = 1 Peta byte
- 1024 Peta byte = 1 Exa byte

- Charles Babbage was known as Father of computer.
- PARAM-8000 India's first Super Computer developed by C-DAC Pune in 1998
- First Digital Computer – ENIAC - Invented by - J. Presper Eckert and John Mauchly

- First computer with RAM - MIT introduces the Whirlwind machine March 8, 1955, a revolutionary computer that was the first digital computer with magnetic core RAM and real-time graphics.

- The first minicomputer - In 1960 Digital Equipment Corporation released its first of many PDP computers the PDP-1.

- The first laptop - First Laptop was introduced in 1981 by Adom Osborne and the company "EPSON" manufactured first Laptop.

- The first computer company - The first computer company was the Electronic Controls Company and was founded in 1949 by J. Presper Eckert and John Mauchly, the same individuals who helped create the ENIAC computer. The company was later renamed to EMCC or Eckert-Mauchly Computer Corporation and released a series of mainframe computers under the UNIVAC name.

- The first multimedia computer - In 1992 Tandy Radio Shack becomes one of the first companies to release a computer based on the MPC standard with its introduction of the M2500 XL/2 and M4020 SX computers.

- The first Apple computer - Steve Wozniak designed the first Apple known as the Apple-I computer in 1976.

- Mother Board is known as System Board.

- ENIAC: Electronic Numerical Integrator and Calculator
- EDSAC: Electronic Delay Storage Automatic Calculator
- EDVAC: Electronic Discrete Variable Automatic Computer (1950)
- UNIVAC: Universal Advance Computer

Network Devices:

- **Modem:** Modem stands for Modulator-Demodulator. It is used to connect computers for communication via telephone lines.
- **Hub:** It works at the Physical layer. It just acts like a connector of several computers i.e. simply connects all the devices on its ports together. It broadcasts all the data packets arriving at it with no filtering capacity.
- **Switch:** It works at the Data Link Layer. It is used for dividing a network into segments called subnets. It provides filtering of data packets and prevents network traffic also.
- **Repeater:** It operates at the Physical Layer. It is used to amplify a signal that has lost its original strength so as to enable them to travel long distances.
- **Router:** It works at the Network Layer and is used to connect different networks that have different architectures and protocols. It sends the data packets to desired destination by choosing the best path available thus reducing network traffic.
- **Gateway:** It operates in all the layers of the network architecture. It can be used to connect two different networks having different architectures, environment and even models.
- **Bridge:** They are used two connect two LANs with the same standard but using different types of cables. It provides an intelligent connection by allowing only desired messages to cross the bridge thus improving performance. It uses physical addresses of the packets for this decision.

- IPv4 - 32 bits numeric address
- IPv6 - 128 bits hexadecimal address