

**QUESTION BANK : MCQS**  
**CHAPTER 01 : COMPUTER SYSTEM**

**Who is considered the father of modern computers?**

- a) Alan Turing
- b) Charles Babbage
- c) John Von Neumann
- d) Steve Jobs

**Which component performs arithmetic and logical operations?**

- a) Control Unit
- b) ALU
- c) Memory
- d) Input device

**What is the main principle of the Von Neumann architecture?**

- a) Use of a separate storage for data and instructions
- b) Use of the same storage for data and instructions
- c) Use of mechanical operations
- d) Use of parallel processing

**Which of the following is a primary memory type?**

- a) Hard disk
- b) RAM
- c) CD-ROM
- d) USB

**What does a computer system primarily consist of?**

- a) Hardware only
- b) Software only
- c) Hardware and software
- d) Data only

**What is the primary function of the control unit?**

- a) Store data
- b) Decode instructions
- c) Perform calculations
- d) Transfer data

**Which type of memory is volatile?**

- a) ROM
- b) RAM
- c) Hard disk
- d) CD-ROM

**What is the role of the data bus in a computer system?**

- a) Store data

- b) Execute instructions
- c) Transfer data between components
- d) Perform logical operations

**What is an example of application software?**

- a) Operating system
- b) Word processor
- c) Firmware
- d) BIOS

**Which memory type is the fastest?**

- a) Cache
- b) RAM
- c) ROM
- d) Hard disk

**What is the function of input devices?**

- a) Store data
- b) Provide data to the computer
- c) Perform calculations
- d) Execute programs

**What is an example of an output device?**

- a) Keyboard
- b) Monitor
- c) Hard drive
- d) RAM

**What is data transmission?**

- a) Data storage
- b) Data processing
- c) Data movement between components
- d) Data deletion

**Which type of memory is non-volatile?**

- a) RAM
- b) ROM
- c) Cache
- d) Registers

**Which of these is a core component of a computer system?**

- a) Peripheral devices
- b) Operating system
- c) CPU
- d) Network

**What does the Von Neumann bottleneck refer to?**

- a) Limited memory size
- b) Slow data transfer rates
- c) Inefficiency in processors
- d) Lack of input devices

**What does a computer system require to function?**

- a) Data only
- b) Hardware and software
- c) Internet connection
- d) Networking devices

**Which unit is responsible for fetching instructions?**

- a) ALU
- b) Control Unit
- c) Memory
- d) Input devices

**Which of the following is not a type of computer memory?**

- a) Cache
- b) Hard disk
- c) GPU
- d) Registers

**What is the main role of secondary storage in a computer system?**

- a) To process instructions
- b) To store data permanently
- c) To execute programs
- d) To increase processing speed

**What does the acronym ALU stand for?**

- a) Arithmetic Logic Unit
- b) Address Linking Unit
- c) Algorithm Level Unit
- d) Advanced Logical Unit

**Which of the following is an example of system software?**

- a) Microsoft Word
- b) Google Chrome
- c) Linux
- d) Photoshop

**What type of memory loses its content when the computer is turned off?**

- a) ROM
- b) RAM
- c) Hard Disk
- d) SSD

**Which component is directly responsible for executing instructions?**

- a) Control Unit
- b) ALU
- c) Input devices
- d) RAM

**What is the primary function of an operating system?**

- a) Store data
- b) Manage hardware and software resources
- c) Perform arithmetic operations
- d) Design software applications

**What connects all the components of a computer system?**

- a) Motherboard
- b) Cache
- c) Control Unit
- d) CPU

**Which of the following is an example of volatile memory?**

- a) SSD
- b) RAM
- c) Hard Disk
- d) CD-ROM

**Which of these is an example of primary memory?**

- a) External hard drive
- b) Flash drive
- c) RAM
- d) Optical disk

**What is the smallest unit of information in a computer system?**

- a) Byte
- b) Bit
- c) Word
- d) Nibble

**Which memory type stores frequently used data for quick access?**

- a) RAM
- b) Cache
- c) ROM
- d) Registers

**What is the function of the system bus in a computer?**

- a) To execute programs
- b) To interconnect components
- c) To provide power
- d) To decode instructions



**What is a software suite?**

- a) A collection of unrelated software tools
- b) A package of related software programs
- c) A single standalone application
- d) A program used for memory management

**Which is an example of firmware?**

- a) Operating system
- b) BIOS
- c) Word Processor
- d) Hard drive

**Which of the following memory types is the fastest?**

- a) Hard disk
- b) Cache
- c) RAM
- d) ROM

**What does the term "data transmission" refer to?**

- a) Data storage
- b) Data communication between components
- c) Data encryption
- d) Data processing

**What is the primary purpose of registers in a CPU?**

- a) To store data permanently
- b) To temporarily store instructions and data being processed
- c) To connect input/output devices
- d) To execute complex programs

**What is the difference between RAM and ROM?**

- a) RAM is volatile; ROM is non-volatile
- b) ROM is faster than RAM
- c) RAM is read-only; ROM is read-write
- d) Both are used for permanent storage

**What is the purpose of a control unit in a CPU?**

- a) Perform arithmetic operations
- b) Manage memory hierarchy
- c) Direct the operation of the processor
- d) Store frequently used instructions

## QUESTIONS BANK: SHORT QUESTIONS

### CHAPTER 01: COMPUTER SYSTEM

1. Define a computer system.
2. What are the main components of a computer system?
3. Describe the role of the CPU in a computer system.
4. What is the Von Neumann architecture?
5. What is the significance of the control unit in a CPU?
6. Explain the difference between RAM and ROM.
7. What is a data bus?
8. Define cache memory and its role.
9. What is the purpose of a system bus?
10. Explain the concept of software engineering.
11. Differentiate between hardware and software.
12. What is the function of the ALU in a computer system?
13. Define operating system software.
14. What are examples of input and output devices?
15. Explain the hierarchy of memory in a computer.
16. What is volatile memory?
17. Define non-volatile memory.
18. Describe primary memory and its importance.
19. What is secondary storage?
20. Explain data transmission.
21. What are registers in a CPU?
22. Differentiate between volatile and non-volatile memory.
23. Explain the term "cache memory."
24. What is the role of secondary memory in a computer system?
25. Define software engineering.
26. What is a control bus?
27. What is the significance of the motherboard in a computer system?
28. Define firmware with an example.
29. What is an instruction cycle?
30. Explain the term "data communication."
31. What is the role of system software in a computer system?
32. Define input and output devices with examples.
33. What is the difference between a hard drive and SSD?
34. Describe the concept of primary and secondary memory.
35. What are the advantages of Von Neumann architecture?
36. Explain the term "bus" in the context of a computer system.
37. What are the main types of software?
38. Differentiate between application software and system software.
39. Define multiprocessing.
40. What are the types of computer memory?
41. Explain the function of an arithmetic logic unit.
42. What is the role of the program counter in a CPU?
43. What are the components of a computer system?
44. What is the purpose of the instruction register?

45. What is the function of a data bus?
46. Explain the difference between sequential access and random access.
47. What is a binary number system, and why is it used in computers?
48. Define "instruction set" in the context of a processor.
49. What is pipelining in CPU operations?
50. What are examples of embedded systems?
51. What is the function of BIOS in a computer?
52. Define "bootstrapping" in the context of computer systems.
53. What is a multi-core processor?
54. Explain how data transmission happens in a computer system.
55. What is the importance of backup storage?
56. Define hardware engineering.
57. What is a stack, and where is it used in a computer system?
58. What is the difference between a workstation and a personal computer?
59. Define virtualization.
60. What are the benefits of modular software design?

### **QUESTIONS BANK : LONG QUESTIONS**

#### **CHAPTER 01: COMPUTER SYSTEM**

1. Discuss the evolution of computer systems from the first generation to modern computers.
2. Describe the core components of a computer system with a diagram.
3. Discuss the types of memory and their hierarchy in a computer system.
4. What is the difference between software engineering and hardware engineering? Provide examples.
5. Explain the process of data transmission within a computer system.
6. Describe the role and types of computer software.
7. Discuss the types of systems and their applications in computing.
8. Explain the impact of data communication on modern computer systems.
9. Describe the role of software and hardware integration in system performance.

