

Chapter 7 and 8 : Introductory Electronics and IT

MCQs;

1. The basic unit of information in a computer is called:

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

Answer: a)

2. Which of the following is used for storing data in a computer?

- a) CPU
- b) RAM
- c) Monitor
- d) Keyboard

Answer: b)

3. The number system used by computers is:

- a) Decimal
- b) Binary
- c) Octal
- d) Hexadecimal

Answer: b)

4. A logic gate which gives output 1 only when both inputs are 1 is called:

- a) AND gate
- b) OR gate
- c) NOT gate
- d) NAND gate

Answer: a)

5. A device that converts an analog signal to a digital signal is called:

- a) DAC
- b) ADC
- c) Amplifier
- d) Modulator

Answer: b)

6. The most commonly used logic gate in electronic circuits is:

- a) OR gate

- b) AND gate
- c) NOT gate
- d) XOR gate

Answer: b)

7. Which of the following is an example of an input device?

- a) Printer
- b) Monitor
- c) Mouse
- d) Speaker

Answer: c)

8. The smallest unit of storage in a computer is:

- a) Bit
- b) Byte
- c) Kilobyte
- d) Megabyte

Answer: a)

9. A group of eight bits is known as a:

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

Answer: a)

10. Which of the following is an output device?

- a) Keyboard
- b) Monitor
- c) Scanner
- d) Microphone

Answer: b)

11. The basic building block of a digital circuit is:

- a) Transistor
- b) Resistor
- c) Capacitor
- d) Logic gate

Answer: d)

12. A NOT gate gives the opposite of its input. If the input is 1, the output is:

- a) 1
- b) 0
- c) Undefined
- d) Same

Answer: b)

13. Which component is used to store data temporarily in a computer?

- a) Hard drive
- b) RAM
- c) ROM
- d) CPU

Answer: b)

14. The binary number 1010 is equivalent to which decimal number?

- a) 5
- b) 8
- c) 10
- d) 12

Answer: c)

15. Which device is used to connect a computer to the internet?

- a) Monitor
- b) Keyboard
- c) Modem
- d) Speaker

Answer: c)

16. The process of converting digital data into an analog signal is called:

- a) Modulation
- b) Demodulation
- c) Amplification
- d) Digitalization

Answer: a)

17. A device that performs binary operations like addition and subtraction in a computer is called the:

- a) ALU
- b) CPU
- c) RAM

d) GPU

Answer: a)

18. The 'OR' logic gate gives an output of 1 when:

- a) Both inputs are 0
- b) Both inputs are 1
- c) At least one input is 1
- d) Both inputs are 1 or both are 0

Answer: c)

19. Which of the following is a permanent storage device?

- a) RAM
- b) ROM
- c) Cache memory
- d) CPU

Answer: b)

20. A computer's central processing unit (CPU) is responsible for:

- a) Input/output operations
- b) Storing data
- c) Performing arithmetic and logical operations
- d) Displaying data on the screen

Answer: c)

21. Which of the following is not a type of memory?

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

Answer: c)

22. A device that allows multiple computers to share a single Internet connection is called:

- a) Modem
- b) Router
- c) Switch
- d) Hub

Answer: b)

23. Which of the following is an example of a secondary storage device?

- a) CPU

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

Answer: c)

24. A system of interconnected computers that can share resources and information is called:

- a) Database
- b) Network
- c) Mainframe
- d) Server

Answer: b)

25. The number system used by computers to process data is:

- a) Decimal
- b) Binary
- c) Octal
- d) Hexadecimal

Answer: b)

26. Which logic gate performs an operation that is opposite to that of an AND gate?

- a) OR gate
- b) NAND gate
- c) NOR gate
- d) XOR gate

Answer: b)

27. In electronics, a microprocessor is:

- a) A memory device
- b) A storage device
- c) A microcontroller
- d) A CPU on a chip

Answer: d)

28. Which of the following is a feature of an integrated circuit (IC)?

- a) It consists of multiple transistors, resistors, and capacitors
- b) It is a single transistor
- c) It can only store data
- d) It works as a memory module

Answer: a)

29. The instruction set of a microprocessor defines:

- a) The tasks it can perform

- b) The types of memory it can access
- c) The speed of operation
- d) The input-output devices it can connect with

Answer: a)

30. Which of the following is the largest unit of data?

- a) Byte
- b) Kilobyte
- c) Megabyte
- d) Gigabyte

Answer: d)

31. Which of the following is a key component of a computer network?

- a) Transistor
- b) Router
- c) Resistor
- d) Microphone

Answer: b)

32. The hardware component of a computer that processes instructions and data is called the:

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

Answer: b)

33. Which of the following is the primary function of an operating system in a computer?

- a) To execute programs
- b) To perform calculations
- c) To manage hardware and software resources
- d) To store data

Answer: c)

34. In digital electronics, the device used to store binary data is a:

- a) Flip-flop
- b) Diode
- c) Capacitor
- d) Transistor

Answer: a)

35. The process of transferring data from a computer to a storage device is called:

- a) Uploading
- b) Downloading

- c) Writing
- d) Fetching

Answer: c)

36. The use of electronic devices to convert sound into digital data is an example of:

- a) Amplification
- b) Modulation
- c) Analog-to-digital conversion
- d) Digital-to-analog conversion

Answer: c)

37. The technology used to transfer digital data over long distances is called:

- a) Networking
- b) Telecommunication
- c) Electromagnetic induction
- d) Signal processing

Answer: b)

38. Which of the following is true for NAND gates?

- a) The output is true only when both inputs are false
- b) The output is false only when both inputs are true
- c) The output is true when at least one input is true
- d) The output is false when at least one input is false

Answer: b)

39. Which of the following are used for processing digital signals in electronics?

- a) Microprocessors
- b) Amplifiers
- c) Oscillators
- d) Capacitors

Answer: a)

40. A computer virus is a type of:

- a) Hardware
- b) Software
- c) Network protocol
- d) Operating system

Answer: b)