

8086 MICROPROCESSOR

Q1. 8086 microprocessor supports _____ modes of operation.

- A. 2
- B. 3
- C. 4
- D. 5

ANS1. A

Q2. 8086 can access up to _____ memory.

- A. 512 KB
- B. 1 MB
- C. 2 MB
- D. 256 KB

ANS1. B

Q3. 8086 has _____ address bus.

- A. 16-bit
- B. 18-bit
- C. 20-bit
- D. 24-bit

ANS1. C

Q4. Which flag is set to 1 when the result of arithmetic or logical operation is zero else it is set to zero?

- A. Trap flag
- B. Zero flag
- C. Carry flag
- D. Overflow flag

ANS1. B

Q5. Which flag represents the result when the system capacity is exceeded?

- A. Trap flag
- B. Auxiliary flag
- C. Carry flag
- D. Overflow flag

ANS1. B

Q6. It is used to write the data into the memory or the output device depending on the status of M/IO signal.

- A. IR

- B. HLDA
- C. HR
- D. WR

ANS1. D

Q7. Which instruction is used to load the address of operand into the provided register?

- A. LEA
- B. LDS
- C. LES
- D. LAHF

ANS1. A

Q8. The different ways in which a source operand is denoted in an instruction is known as:

- A. Instruction Set
- B. Interrupts
- C. Architecture
- D. Addressing Modes

ANS1. D

Q9. A microprocessor is a _____ chip integrating all the functions of a CPU of a computer.

- A. multiple
- B. single
- C. double
- D. triple

ANS1. B

Q10. The work of EU is _____.

- A. encoding
- B. decoding
- C. processing
- D. calculations

ANS1. B

Q11. The register used to store the flags is called as _____.

- A. Flag register
- B. Status register
- C. Test register
- D. Log register

ANS 11. B

Q12. The 16 bit flag of 8086 microprocessor is responsible to indicate _____.

- A. The condition of result of ALU operation
- B. The condition of memory
- C. The result of addition
- D. The result of subtraction

ANS 12. A

Q13. The CF is known as _____.

- A. Carry flag
- B. Condition flag
- C. Common flag
- D. Single flag

ANS 13. A

Q14. The SF is known as _____.

- A. Service flag
- B. Sign flag
- C. Single flag
- D. Condition flag

ANS 14. B

Q15. The IF is known as _____.

- A. Initial flag
- B. Indicate flag
- C. Interrupt flag
- D. Inter flag

ANS 15. C

Q16. The IF is known as _____.

- A. Initial flag
- B. Indicate flag
- C. Interrupt flag
- D. Inter flag

ANS 16. C

Q17. The IF is known as _____.

- A. Initial flag
- B. Indicate flag
- C. Interrupt flag
- D. Inter flag

ANS 17. C

Q18. The instruction that is used to transfer the data from source operand to destination operand is :

- A. Data copy / transfer instruction
- B. Branch instruction
- C. Arithmetic / logical instruction
- D. String instructions

ANS 17. C

CHAPTER 1: BASIC CONCEPTS AND COMPUTER EVOLUTION

Q1. _____ bus structure is usually used to connect I/O devices..

- A. Single bus
- B. Multiple bus
- C. Star bus
- D. RAM bus

ANS 1. A

Q2. The main advantage of using single bus structure is _____.

- A. Fast data transfers
- B. Cost effective connectivity and speed
- C. Cost effective connectivity and ease of attaching peripheral devices
- D. None of the above

ANS 2. C

Q3. The ISA standard buses are used to connect _____.

- A. RAM and Processor
- B. GPU and Processor
- C. Hard-disk and Processor
- D. CD / DVD drives and Processor

ANS 3. C

Q4. Which registers can interact with the secondary storage?

- A. MAR
- B. PC
- C. IR

D. AC

ANS 4. A

Q5. To extend the connectivity of the processor bus we use _____.

- A. PCI Bus
- B. SCSI Bus
- C. Controllers
- D. Multiple Bus

ANS 5. A

Q6. A source program is usually written in _____.

- A. Assembly language
- B. Machine-level language
- C. High-level language
- D. Natural language

ANS 6. C

Q7. _____ are numbers and encoded characters which are generally used as operands.

- A. Input
- B. Data
- C. Information
- D. Stored values

ANS 7. B

Q8. The ALU stores the immediate result in _____.

- A. Accumulator
- B. Queue
- C. Stack
- D. Memory locations

ANS 8. A

Q9. The control unit controls other units by generating _____.

- A. Control signals
- B. Timing signals
- C. Transfer signals
- D. Command signals

ANS 9. B

Q10. The extremely small and fast RAM is known as _____.

- A. Cache

- B. Heaps
- C. Accumulators
- D. Stacks

ANS 10. A

Q11. The smallest entity of memory is called _____.

- A. Cell
- B. Block
- C. Instance
- D. Unit

ANS 11. A

Q12. The branch of study that deals with the computer system's conceptual design and basic overview is known as:

- A. Computer Anatomy
- B. Computer Architecture
- C. Computer OS
- D. Computer Interface

ANS12. B

Q13. Which of the following technologies was used in second generation computer?

- A. Vacuum Tubes
- B. Transistors
- C. Integrated Circuits
- D. VLSI Circuits

ANS13. B

CHAPTER 2: PERFORMANCE ISSUES

Q1. _____ are used to overcome the difference in data transfer speeds of various devices.

- A. Speed enhancing circuitry
- B. Bridge circuits
- C. Multiple buses
- D. Buffer registers

ANS 1. D

Q2. Two processors A and B have clock frequencies of 700 MHz and 900MHz respectively. Suppose A can execute an instruction with an average of 3 steps and B can execute with an average of 5 steps. For the execution of the same instruction which processor is faster?

- A. A
- B. B
- C. Both takes equal amount of time
- D. None of the above

ANS 2. A

Q3. A processor performing fetch or decoding of different instruction during the execution of another instruction is called _____.

- A. Super-scaling
- B. Pipelining
- C. Parallel computation
- D. Architecture

ANS 3. B

Q4. The clock rate of the processor can be improved by _____.

- A. Improving the IC technology of the logic circuits
- B. Reducing the amount of processing done in one step
- C. By using the over-clocking method
- D. All of the above

ANS 4. D

Q5. SPEC stands for _____.

- A. Standard Performance Evaluation Code
- B. System Processing Enhancing Code
- C. System Performance Evaluation Corporation
- D. Standard Processing Enhancement Corporation

ANS 5. C

Q6. CISC stands for _____.

- A. Complete Instruction Sequential Compilation
- B. Computer Integrated Sequential Compiler
- C. Complex Instruction Set Computer
- D. Complex Instruction Sequential Compilation

ANS 6. C

Q7. Which instruction is used to load the address of operand into the provided register?

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ANS1. A

Q8. The different ways in which a source operand is denoted in an instruction is known as:

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- C. Architecture
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ANS1. D

Q9. A microprocessor is a _____ chip integrating all the functions of a CPU of a computer.

- A. multiple
- B. single
- C. double
- D. triple

ANS1. B

Q10. The work of EU is _____.

- A. encoding
- B. decoding
- C. processing
- D. calculations

ANS10. B

Q11. Which of the following is the important characteristics of computers?

- E. speed
- F. accuracy
- G. storage
- H. all of the above

ANS11. D

Q12. Which of the following is not a hardware component of computer?

- A. memory
- B. scanner
- C. operating system
- D. CPU

ANS12. C

CHAPTER 3: A TOP-LEVEL VIEW OF COMPUTERFUNCTION AND INTERCONNECTION

Q1. During the execution of a program which gets initialized first?

- A. MDR
- B. IR
- C. PC
- D. MAR

ANS1. C

Q2. The decoded instruction is stored in _____.

- A. IR
- B. PC
- C. Registers
- D. AC

ANS1. A

Q3. Which of the register(s) of the processor is / are connected to Memory Bus?

- A. PC
- B. MAR
- C. IR
- D. Both PC AND MAR

ANS1. B

Q4. ISP stands for _____.

- A. Instruction Set Processor
- B. Information Standard Processing
- C. Interchange Standard Protocol
- D. Interrupt Service Procedure

ANS1. A

Q5. The interrupt request line is a part of the _____.

- A. Data line
- B. Control line

- C. Address line
- D. None of the above

ANS1. B

Q6. The signal set to the device from the processor to the device after receiving an interrupt is _____.

- A. Interrupt acknowledge
- B. Return signal
- C. Service signal
- D. Permission signal

ANS1. A

CHAPTER 4: CACHE MEMORY

Q1. To reduce the memory access time we generally make use of _____.

- A. Heaps
- B. SSD
- C. SDRAMs
- D. Cache memory

ANS 1. D

Q2. _____ is usually used to increase the size of physical memory.

- A. Secondary memory
- B. Virtual memory
- C. Hard-disk
- D. Disks

ANS 2. B

Q3. The internal components of the processor are connected by _____.

- A. Processor intra-connectivity circuitry
- B. Processor bus
- C. Memory bus
- D. Single bus

ANS 3. B

Q4. During the execution of instructions, a copy of the instructions is placed in the _____.

- A. Register

- B. RAM
- C. Main memory
- D. Cache

ANS 4. D

Q5. To get the physical address from the logical address generated by CPU we use _____

- A. MAR
- B. MMU
- C. Overlays
- D. TLB

ANS 5. B

Q6. During the transfer of data between the processor and memory we use _____.

- A. Cache
- B. TLB
- C. Buffers
- D. Registers

ANS 6. D

Q7. _____ method is used to map logical address of variable length onto physical memory.

- A. Paging
- B. Overlays
- C. Segmentation
- D. Paging with segmentation

ANS1. C

Q8. Physical memory is divided into sets of finite size called as _____.

- A. Frames
- B. Pages
- C. Blocks
- D. Vectors

ANS1. A

Q9. What is the high speed memory between the main memory and the CPU called?

- A. Registers
- B. Cache memory
- C. Secondary storage memory
- D. Virtual memory

ANS 9. B

Q10. Whenever the data is found in the cache memory it is called a _____.

- A. HIT
- B. MISS
- C. FOUND
- D. ERROR

ANS 10. A

Q11. The transfer between CPU and Cache is called _____.

- A. Block transfer
- B. Word transfer
- C. Set transfer
- D. Associative transfer

ANS 11. B

Q12. LRU stands for _____.

- A. Low Rate Usage
- B. Least Rate Usage
- C. Least Recently Used
- D. Low Required Usage

ANS 12. C

Q13. When the data at a location in cache is different from the data in the main memory, the cache is called _____.

- A. Unique
- B. Inconsistent
- C. Variable
- D. Fault

ANS 13. B

Q14. Which of the following is not a write policy to avoid Cache Coherence?

- A. Write through
- B. Write within
- C. Write back
- D. Write buffer

ANS 14. B

Q15. In _____ mapping, the data can be mapped anywhere in the Cache Memory.

- A. Associative
- B. Direct
- C. Set-associative
- D. Indirect

ANS 15. A

Q16. Cache Memory is implemented using the DRAM chips.

- A. True
- B. False

ANS 16. B

COA MCQ CHAPTER 5 & 6

Q1. What is the permanent memory built into your computer called?

- A. RAM
- B. ROM
- C. CPU
- D. CD-ROM

ANS 1. B

Q2. Storage which stores or retains data after power off is called _____.

- A. Volatile storage
- B. Non-volatile storage
- C. Sequential storage
- D. Direct storage

ANS2. B

Q3. The contents of memory into blocks of the same size is called as _____.

- A. ROM
- B. EPROM
- C. EEPROM
- D. All of the above

ANS 3. D

Q4. Main memory of computer is _____.

- A. Internal
- B. External
- C. Both
- D. Auxilliary

ANS 4. A

Q5. Which of the following memories must be refreshed many times per second?

- A. EPROM

- B. ROM
- C. Static RAM
- D. Dynamic RAM

ANS 5. D

Q6. A half-byte is known as _____.

- A. data
- B. bit
- C. half-byte
- D. nibble

ANS 6. D

Q7. USB type storage device is _____.

- A. Secondary
- B. Auxiliary
- C. Tertiary
- D. Primary

ANS 7. A

Q8. Which device is used to back-up the data?

- A. Floppy disk
- B. Tape
- C. Network drive
- D. All of the above

ANS 8. D

Q9. With a CD you can perform _____.

- A. read
- B. write
- C. read and write
- D. none of these

ANS 9. A

Q10. Flash memory is also known as _____.

- A. Flash RAM
- B. Flash ROM
- C. Flash DRAM
- D. Flash DROM

ANS 10. A

Q11. RAM is a _____ memory.

- A. External
- B. Internal
- C. Main
- D. Auxiliary

ANS 11. C

Q12. _____ is the permanent memory unit built into the computer systems.

- A. ROM
- B. CPU
- C. DVD-ROM
- D. RAM

ANS 12. A

Q13. Hard-disk drives are considered as _____ storage medium.

- A. Flash
- B. Non-volatile
- C. Temporary
- D. Permanent

ANS 13. B

Q14. The storage element of a SRAM is _____.

- A. Diode
- B. Resistor
- C. Capacitor
- D. Flip-flop

ANS 14. D

Q15. Capacity of hard-disk is measured in _____.

- A. Gigabytes
- B. Megabytes
- C. Kilobytes
- D. Bytes

ANS 15. A

COA MCQ CHAPTER 8

Q1. Which of the following is not a type of Operating System?

- A. Batch Processing
- B. Multi-programming

- C. Latch Programming
- D. Real time programming

ANS 1. C

Q2. BIOS programs are embedded on a chip called

- A. Firmware
- B. IC
- C. Hardware
- D. Application programs

ANS 1. A