

University of Mumbai
Examination 2020 under cluster 9 (FAVI I)

Program: BE Computer Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code: CSC403 and Course Name: Computer Organization and Architecture

Time: 1 hour

Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	Which of the following is an output device ?
Option A:	Keyboard
Option B:	Mouse
Option C:	Monitor
Option D:	Joystick

Q2.	Which of the following is true about Computer Architecture?
Option A:	It acts as the interface between hardware and software.
Option B:	Computer Architecture tells us how exactly all the units in the system are arranged and interconnected.
Option C:	Computer Architecture is concerned with the structure and behaviour of a computer system as seen by the user.
Option D:	It involves Physical Components

Q3.	Which of the following is true about Computer Organization?
Option A:	It deals with high-level design issues.
Option B:	It involves Logic (Instruction sets, Addressing modes, Data types, Cache optimization).
Option C:	Computer Organization tells us how exactly all the units in the system are arranged and interconnected.
Option D:	It is visible to programmers

Q4.	The _____ is the computational center of the CPU.
Option A:	Registers
Option B:	ALU
Option C:	Flip-Flop
Option D:	Multiplexer

Q5.	Which memory device is generally made of semiconductors?
Option A:	RAM
Option B:	Hard-disk



Option C:	Floppy disk
Option D:	Cd disk

Q6.	The small extremely fast, RAM's are called as _____.
Option A:	Cache
Option B:	Heaps
Option C:	Accumulators
Option D:	Stacks

Q7.	The ALU makes use of _____ to store the intermediate results.
Option A:	Accumulators
Option B:	Registers
Option C:	Heap
Option D:	Stack

Q8.	The Input devices can send information to the processor.
Option A:	When the SIN status flag is set
Option B:	When the data arrives regardless of the SIN flag
Option C:	Neither of the cases
Option D:	Either of the cases

Q9.	_____ bus structure is usually used to connect I/O devices.
Option A:	Single bus
Option B:	Multiple bus
Option C:	Star bus
Option D:	Rambus

Q10.	_____ is generally used to increase the apparent size of physical memory.
Option A:	Secondary memory
Option B:	Virtual memory
Option C:	Hard-disk
Option D:	Disks

Q11.	The time delay between two successive initiations of memory operation _____.
Option A:	Memory access time
Option B:	Memory search time

Option C:	Memory cycle time
Option D:	Instruction delay

Q12.	A processor performing fetch or decoding of different instruction during the execution of another instruction is
Option A:	Super-scaling
Option B:	Pipe-lining
Option C:	Parallel Computation
Option D:	None of the mentioned

Q13.	When Performing a looping operation, the instruction gets stored in the _____
Option A:	Registers
Option B:	Cache
Option C:	System Heap
Option D:	System stack

Q14.	If a processor clock is rated as 1250 million cycles per second, then its clock period is _____.
Option A:	$1.9 * 10^{-10}$ sec
Option B:	$1.6 * 10^{-9}$ sec
Option C:	$1.25 * 10^{-10}$ sec
Option D:	$8 * 10^{-10}$ sec

Q15.	CISC stands for _____.
Option A:	Complete Instruction Sequential Compilation
Option B:	Computer Integrated Sequential Compiler
Option C:	Complex Instruction Set Computer
Option D:	Complex Instruction Sequential Compilation

Q16.	The instruction, Add #45,R1 _____.
Option A:	Adds the value of 45 to the address of R1 and stores 45 in that address
Option B:	Adds 45 to the value of R1 and stores it in R1
Option C:	Finds the memory location 45 and adds that content to that of R1
Option D:	None of the mentioned

Q17.	In the case of, Zero-address instruction method the operands are stored in _____
Option A:	Registers
Option B:	Accumulators
Option C:	Push down stack

Option D:	Cache
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Q18.	The addressing mode which makes use of in-direction pointers is _____
Option A:	Indirect addressing mode
Option B:	Index addressing mode
Option C:	Relative addressing mode
Option D:	Offset addressing mode

Q19.	The addressing mode/s, which uses the PC instead of a general purpose register is _____
Option A:	Indexed with offset
Option B:	Relative
Option C:	Direct
Option D:	Both Indexed with offset and direct

Q20.	The addressing mode, where you directly specify the operand value is _____.
Option A:	Immediate
Option B:	Direct
Option C:	Definite
Option D:	Relative

Q21.	Which representation is most efficient to perform arithmetic operations on the numbers?
Option A:	Sign-magnitude
Option B:	1's complement
Option C:	2'S complement
Option D:	None of the mentioned

Q22.	When we perform subtraction on -7 and 1 the answer in 2's complement form is _____.
Option A:	1010
Option B:	1110
Option C:	110
Option D:	1000

Q23.	The register used to store the flags is called as _____.
Option A:	Flag register
Option B:	Status register

Option C:	Test register
Option D:	Log register

Q24.	The most efficient method followed by computers to multiply two signed numbers is _____.
Option A:	Booth's algorithm
Option B:	Bit pair recording of multipliers
Option C:	Restoring algorithm
Option D:	Non restoring algorithm

Q25.	The files which are required for the starting up of a system are stored on the _____.
Option A:	Harddisk
Option B:	ROM
Option C:	RAM
Option D:	Fast solid state chips in the motherboard