

CIT246 List of Questions

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Q1 _____ addressing mode is used to initialise the value of a variable

- ☐ Register
- ☒ Immediate
- ☐ Indirect
- ☐ Direct

Q2 The address capability of _____ addressing scheme is determined by the size of the register.

- ☒ register indirect
- ☐ register
- ☐ indirect
- ☐ stack

Q3 The outputs of all _____ gates are high if any of the inputs are low

- ☐ AND
- ☒ NAND
- ☐ EX-OR
- ☐ OR

Q4 A counter is a _____ whose value is incremented by one on the occurrence of some event

- ☐ cache
- ☐ auxilliary storage
- ☒ register
- ☐ all of the above

Q5 _____ I/O is one in which the I/O operations are completely controlled by the CPU

- ☐ interrupt driven
- ☒ programmed
- ☐ Direct memory access
- ☐ random CPU memory access

Q6 _____ module controls the data exchange between the external devices and the main memory; or external devices and CPU registers.

- ☐ memory
- ☐ register
- ☐ external
- ☒ Input/Output

Q7 In Wikes design a microinstruction has _____ major components

- ☐ two
- ☐ three
- ☐ four
- ☐ none of the above

Q8 Karnaugh map is a convenient way of representing and simplifying _____ functions of 4 to 6 variables

- ☐ Boolean
- ☐ Algebraic
- ☐ Numerical
- ☐ none of the above

Q9 _____ is needed in a computer to store instructions and data at the time of program execution.

- ☐ registers
- ☐ cache memory
- ☐ main memory
- ☐ auxiliary memory

Q10 An I/O module is a mediator between the _____ and the I/O devices.

- ☐ processor
- ☐ memory
- ☐ control unit
- ☐ all of the above

Q11 The storage devices along with the _____ on how to control and manage these storage devices constitute the memory system of a computer

- ☐ algorithm
- ☐ information
- ☐ instruction
- ☐ all of the above

Q12 _____ circuits are logic circuits whose present output depends on the past inputs.

- ☐ Serial
- ☐ Parallel
- ☐ Sequential
- ☐ Combinational

Q13 The AND gate is an electronic circuit that gives a high output only if _____ of its inputs are high

- ☐ at least one
- ☐ some
- ☐ all
- ☐ none

Q14 The following are the basic operations in Boolean algebra except:

- ☐ OR
- ☐ AND
- ☐ NOR
- ☐ NOT

Q15 _____ is a cache writing technique in which updates are made only in the cache, setting a bit called update-bit

- ☐ write on
- ☐ write through
- ☐ write bit
- ☐ write block

Q16 The _____ is called a sequential access device.

- ☐ tape
- ☐ disk
- ☐ flash
- ☐ none of the above

Q17 The _____ core memory requires two wires.

- ☐ ironized
- ☐ composite
- ☐ ferrite
- ☐ all of the above

Q18 The ferrite core memories were _____.

- ☐ volatile
- ☐ non-volatile
- ☐ combustible
- ☐ all of the above

Q19 The number of bits read in or out of the memory in a single read or write operation is referred to as _____.

- ☐ unit of transfer
- ☐ storage capacity
- ☐ access time
- ☐ cycle time

Q20 The _____ and NOR gates are called universal functions.

- ☐ AND
- ☐ NAND
- ☐ EX-OR
- ☐ OR

Q21 _____ circuits are time dependent

- ☐ combinatorial
- ☐ random
- ☐ sequential
- ☐ switching

Q22 The _____ ensures sharing of a common line by more than one input lines

- ☐ modem
- ☐ multiplexer
- ☐ modulator
- ☐ none of the above

Q23 Which of the following is not one of the features on which the computer system family concept was implemented?

- ☐ Increased complexity of the arithmetic logic unit
- ☐ Reduced cost
- ☐ Increase in memory – CPU data paths, Reduced cost
- ☐ Simultaneous access of data in higher ends members

Q24 Instruction execution takes place in the CPU _____

- ☐ registers
- ☐ caches
- ☐ buffer
- ☐ memory

Q25 In _____ Addressing Scheme, the address of an operand is implied

- ☐ Indirect
- ☐ Stack
- ☐ Immediate
- ☐ Relative

Q26 _____ converts one type of coded information to another form

- ☐ cable
- ☐ channel
- ☐ bus
- ☐ decoders

Q27 Register _____ refers to the amount of information that can be held in a register at a time for processing

- ☐ length
- ☐ weight
- ☐ width
- ☐ size

Q28 _____ Addressing Scheme is used to address the consecutive locations of

memory

- ☐ Relative
- ☒ Indexed
- ☐ Stack
- ☐ Immediate

Q29 Interrupts are mainly used for improving the _____ of processing

- ☐ speed
- ☒ efficiency
- ☐ cost
- ☐ integrity

Q30 An octal system has _____ symbols

- ☐ six
- ☐ seven
- ☒ eight
- ☐ five

Q31 The base of a number system is referred to as its _____

- ☐ index
- ☐ basis
- ☒ radix
- ☐ background

Q32 > The outputs of all _____ gates are low if any of the inputs are high

- ☐ OR
- ☐ AND
- ☐ NAND
- ☒ NOR

Q33 Evaluation-Stack Architecture are _____ address machines

- ☒ Zero
- ☐ One
- ☐ Two
- ☐ Relative

Q34 A demerit of indirect addressing scheme is that it requires _____ memory references to fetch the operand

- ☐ one
- ☒ two
- ☐ four
- ☐ three

Q35 Physically, a bus is a number of _____ electrical conductors

- ☐ serial

- ☐ vertical
- ☒ parallel
- ☐ horizontal

Q36 A combinational circuit, which performs the addition of two bits, is called a _____-adder

- ☐ full
- ☐ complete
- ☐ mid
- ☒ half

Q37 Memory transfer is achieved via a system _____

- ☐ call
- ☒ bus
- ☐ buffer
- ☐ shuffle

Q38 _____ register acts as a buffer storage between the main memory and the CPU

- ☐ instruction
- ☒ data
- ☐ cache
- ☐ memory

Q39 The _____ -generation computers started with the advent of transistors

- ☐ first
- ☒ second
- ☐ third
- ☐ fourth

Q40 A flip-flop is a _____ cell, which can store a bit of information

- ☒ binary
- ☐ octal
- ☐ hexadecimal
- ☐ denary

Q41 The amount of information which can be transferred between CPU and memory depends on the size of the _____ connecting the two

- ☐ channel
- ☐ cable
- ☐ path
- ☒ bus

Q42 Register _____ refers to the amount of information that can be held in a register at a time for processing

- ☐ size
- ☐ length
- ☐ width
- ☐ weight

Q43 The von Neumann machine uses a _____ program concept

- ☐ stored
- ☐ shared
- ☐ separate
- ☐ joint

Q44 Floating-point numbers are often represented in _____ forms

- ☐ decimalized
- ☐ fractionalised
- ☐ normalised
- ☐ rationalised

Q45 An octal system has _____ symbols

- ☐ six
- ☐ seven
- ☐ eight
- ☐ sixteen

Q46 The base of a number system is referred to as its _____

- ☐ index
- ☐ radix
- ☐ background
- ☐ basis

Q47 The binary number 101010 base 2 is equivalent to _____ in decimal

- ☐ 22
- ☐ 32
- ☐ 42
- ☐ 52

Q48 A single self-contained transistor is called a _____ component

- ☐ continuous
- ☐ combinatorial
- ☐ compact
- ☐ discrete

Q49 _____ allows sharing of a common line by more than one input lines

- ☐ Multiplexer
- ☐ Modem

- ☐ integrator
- ☐ modulator

Q50 The _____ gate is also called an inverter

- ☐ NOR
- ☐ AND
- ☐ NAND
- ☐ NOT

Q51 _____ register acts as a buffer storage between the main memory and the CPU

- ☐ Instruction
- ☐ Memory
- ☐ cache
- ☐ Data

Q52 _____ memories are small fast memories placed between the processor and the main memory

- ☐ register
- ☐ buffer
- ☐ cache
- ☐ primary

Q53 A flip-flop is a _____ cell, which can store a bit of information

- ☐ denary
- ☐ binary
- ☐ octal
- ☐ hexadecimal

Q54 _____ circuits are time dependent

- ☐ sequential
- ☐ combinatorial
- ☐ switching
- ☐ random

Q55 The instruction execution takes place in the CPU _____

- ☐ buffers
- ☐ registers
- ☐ cache
- ☐ memories

Q56 A decimal digit is represented as a combination of _____ bits

- ☐ two
- ☐ three
- ☐ four

- ☐ five

Q57 _____ algebra is used for designing and analysing digital circuits

- ☐ complex
- ☐ numerical,
- ☐ abstract
- ☒ boolean

Q58 What is the decimal equivalent of the BCD number 100010010010000?

- ☐ 8920
- ☐ 42220
- ☒ 4490
- ☐ 8940

Q59 In _____ Addressing Scheme, the address of an operand is implied

- ☒ stack
- ☐ memory
- ☐ register
- ☐ gigo

Q60 Memory transfer is achieved via a system _____

- ☐ buffer
- ☒ bus
- ☐ shuffle
- ☐ call

Q61 11001101012 is equivalent to _____

- ☐ 335 base8
- ☒ 1465 base8
- ☐ 6321 base8
- ☐ none of the above

Q62 A function in product of sums form can be implemented using NOR gates by replacing all _____ and OR gates by NOR gates

- ☐ OR
- ☒ AND
- ☐ EX-OR
- ☐ NAND

Q63 The outputs of all _____ gates are high if any of the inputs are low

- ☐ AND
- ☐ OR
- ☐ EX-OR
- ☒ NAND

Q64 There _____ types of I/O commands

- ☐ two
- ☐ three
- ☒ four
- ☐ five

Q65 _____ I/O is one in which the I/O operations are completely controlled by the CPU

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- ☒ write block
- ☐ write bit

Q68 A _____ is called a sequential access device.

- ☐ flash
- ☒ tape
- ☐ disk
- ☐ none of the above

Q69 The ferrite core memory requires _____ wires

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- ☐ three
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- ☐ four

Q70 The ferrite core memories were _____

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Q72 The _____ and NOR gates are called universal functions.

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- ☐ OR
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- ☒ NAND

Q73 The storage devices along with the _____ on how to control and manage these storage devices constitute the memory system of a computer

- ☐ algorithm
- ☐ information
- ☐ instruction
- ☒ all of the above

Q74 The control memory in _____ control is organised as a program logic array like a matrix made of diodes, a simple electronic device.

- ☐ cache
- ☐ micro-programmed
- ☐ parallel,
- ☒ Wilkes

Q75 Micro-instructions can be categorized in _____ general types

- ☒ two
- ☐ three
- ☐ four
- ☐ five

Q76 In Highly Encoded Microinstructions, the encoded bits needed in microinstructions are _____.

- ☐ large
- ☒ small
- ☐ high
- ☐ very small

Q77 Karnaugh map is a convenient way of representing and simplifying _____ functions of 4 to 6 variables

- ☒ Boolean
- ☐ Algebraic
- ☐ Numerical

- ☐ binary

Q78 _____ is needed in a computer to store instructions and data at the time of program execution.

- ☐ registers
- ☐ auxiliary memory
- ☐ main memory
- ☐ cache memory

Q79 The basic function performed by a computer is the program _____

- ☐ coding
- ☐ writing
- ☐ execution
- ☐ processing

Q80 Execution of instructions in the von Neumann machine is carried out in a _____ fashion

- ☐ random
- ☐ direct
- ☐ sequential
- ☐ all of the above