This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "The Input Unit".

1. Which unit is responsible for converting the data received from the user into computer understandable format?

a) Memory Unit
b) Arithmetic & Logic Unit
c) Input Unit
d) Output Unit

Answer: c
Explanation: The Input Unit converts the data, which the user enters into a language which the computer understands, i.e. it converts the data into binary format. The Output Unit is responsible for giving the results in user-understandable format. The Storage Unit is responsible for storing the data after immediate results of processing whereas; the ALU is responsible for various arithmetic and bitwise operations.

2. The only language which the computer understands is _____

a) Assembly Language
b) Binary Language
c) BASIC
d) C Language

Answer: b
Explanation: The Computer understands only binary language which is written in the form of 0s & 1s. A computer can understand assembly language but an assembler is required which converts the assembly language to binary language. Similarly, for understanding high level languages, compilers/interpreters are required.

3. The smallest unit of data in computer is _____

a) Byte
b) Nibble
c) Bit

d) KB

Answer: c
Explanation: A bit is defined as the smallest unit of data in a computer system. It is used as a short form of Binary Digit. A bit can have only two values 0 or 1. A nibble comprises of 4 bits, a byte is a collection of 8 bits whereas KB (Kilobyte) is equal to 1024 bytes.

4. One nibble is equivalent to how many bits?
a) 2
b) 4
c) 8
d) 1

Answer: b
Explanation: A nibble is defined as a unit of data which comprises of 4 binary digits or half of 8-bit byte. Therefore, 1 nibble = 4 bits. A bit is the smallest unit of data in a computer system. A byte = 8 bits, therefore, half of a byte=4 bits=a nibble.

5. Which of the following describes the correct format of an input instruction?
a) IN 82
b) INPUT 82
c) INP 82
d) 82 INP

Answer: a
Explanation: The input/output instructions are used to transfer information between external peripherals and the CPU. The correct format of an input instruction is: IN 8-bit port address.
Here, IN 82 is the correct option, where 82 is the designated port address. All the other options are invalid.

6. The input machine which originated in the United States around 1880s is a
_____

a) Mouse
b) Joystick
c) Keyboard
d) Bar Code Reader

Answer: c
Explanation: A keyboard is an input device which originated in the 1880s and is used to give instructions to the computer in the form of letters and numbers. Mouse is used for the selection of various objects on the screen, joystick is mainly used for gaming purpose and bar code readers are used for reading the bar-codes.

7. What does the COMPUTER stands for?
a) Commonly Operated Machines Used in Technical and Educational Research
b) Commonly Occupied Machines Used in Technical and Educational Research
c) Commonly Operated Machines Used in Technical and Environmental Research
d) Commonly Oriented Machines Used in Technical and Educational Research
---

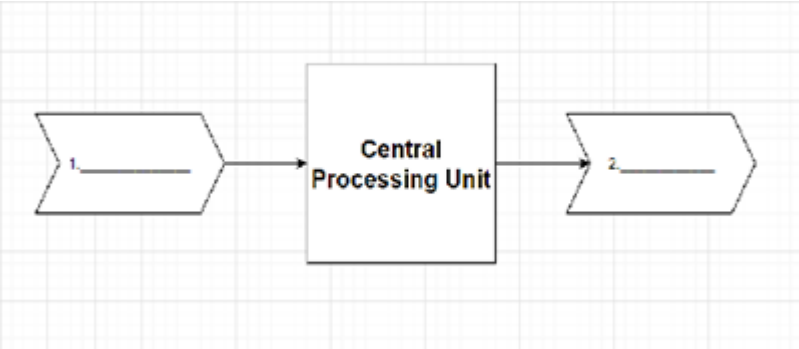
8. 1 yottabyte = _____
a) 1024 TB
b) 1024 EB
c) 1024 ZB
d) 1024 PB

Answer: c
Explanation: 1 yottabyte is equal to 1024 ZB, which stands for zettabyte. Further, 1 ZB=1024 EB (exabyte) and and 1 EB=1024PB (petabyte).

9. Which of the following is not a function of the Input Unit?
a) It reads instructions and data from the outside world.
b) It converts the data into computer acceptable format.
c) It makes the data into user understandable format.
d) It supplies the data and instructions to the computer for further processing.

Answer: c
Explanation: The input unit converts the data into computer understandable format i.e. binary format and not the user understandable format. It is the duty of the output unit to make the data into user understandable format.

10. Label the parts 1 and 2:



a) 1.ALU 2. MU
b) 1.Output unit 2.Input Unit
c) 1.MU 2. ALU
d) 1.Input Unit 2.Output Unit

Answer: d
Explanation: The above diagram is a simple explanation which describes how the instruction is given to the CPU, how it is processed, and then how the result is obtained.
So here, the input unit is used to give instructions to the central processing unit and the output unit is responsible for giving the result to the user

This set of Computer Fundamentals Interview Questions and Answers focuses on "The Output Unit".

1. The process of producing useful information for the user is called _____
a) Controlling
b) Outputting
c) Inputting
d) Processing

Answer: b
Explanation: The Output Unit is responsible for giving the results to the user in the form of a printed report or visual display. The process is referred to as outputting. Controlling is nothing but the manner and sequence in which the instructions are being operated. Inputting means giving instructions to the system whereas, processing means performing certain operations and calculations.

2. The output unit coverts the data entered by the user into computer understandable form.
a) True
b) False

Answer: b
Explanation: The Output unit is responsible for converting the computer obtained data into user understandable format. The Input Unit is responsible for converting the data in computer understandable format.

3. VDU stands for _____
a) Virtual Display Unit
b) Visual Display Unit
c) Virtual Detection Unit
d) Visual Detection Unit

Answer: b
Explanation: A Visual Display unit is also referred to as the monitor who basically

is used to give the results or outputs to the user. It comprises of a cathode ray tube internally.

4. What does SVGA stands for?

a) Standard Visual Graphics Array
b) Super Visual Graphics Array
c) Standard Video Graphics Array
d) Super Video Graphics Array

Answer: d
Explanation: Super Video Graphics Array is a type of Visual Display Unit. It supports 1024 by 768 pixels with 60,000 different colors.

5. The devices that used to give single or multiple colored images and drawings are _____

a) Monitors
b) Printers
c) Plotters
d) VDUs

Answer: c
Explanation: Plotters are the devices which are used to give colored images. They use ink pens or ink jets for drawing. Pens of different colors and shades are used for shading and styling.

6. A special request originated from some device to the CPU to acquire some of its time is called _____

a) Disturbance
b) Attenuation
c) Interrupt
d) Noise

Answer: c
Explanation: An interrupt is a kind of request which takes control of the system bus for some time, then performs all the operations and gives back control to the

CPU. It is usually identified by some number and is handled by the interrupt controller.

7. Line Printers that print one line at a time are _____
a) Laser Printers
b) Inkjet Printers
c) Drum Printers
d) Chain Printers

Answer: c
Explanation: The drum printers have a solid cylindrical drum with characters embossed on its surface in the form of circular bands. It can only print a predefined set of characters.

8. A _____ monitor looks like a television and are normally used with non-portable computer systems.
a) CRT
b) LCD
c) LED
d) Flat Panel Monitors

Answer: a
Explanation: A CRT (or the Cathode Ray Tube) Monitor looks like a television ideally. The flat panel monitors are thinner and lighter in comparison.

9. Which of the following is not a function of the Output Unit?
a) It produces results that can be easily understood by the user
b) It accepts the results produced by the computer
c) It supplies the data and instructions to the outside world
d) It supplies the data and instructions to the computer for further processing
---

Answer: d
Explanation: The output unit is responsible for giving the results to the user in the form of printed report or visual display. It is not responsible for giving the instructions back to the CPU for processing.

10. PCI stands for _____

a) Peripheral Component Interconnect

b) Partial Component Interconnect

c) Peripheral Component Interaction

d) Partial Component Interaction

Answer: a

Explanation: PCI is a high-bandwidth bus that can function as a peripheral bus. Compared with others, it delivers better system performance

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "The Storage Unit".

1. Components that provide internal storage to the CPU are _____

a) Registers
b) Program Counters
c) Controllers
d) Internal chips

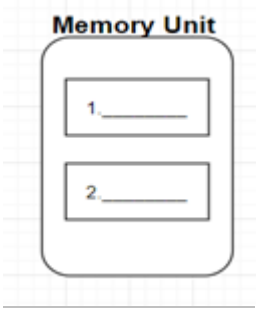
Answer: a
Explanation: The Registers are the fast storage units. They are responsible for storing intermediate computational results in the CPU. The registers can be user accessible or inaccessible.

2. Saving data and instructions to make them readily available is the job of _____

a) Storage Unit
b) Cache Unit
c) Input Unit
d) Output Unit

Answer: a
Explanation: The storage unit is responsible for storing the data. It makes the instructions readily available for additional or initial processing whenever required. The cache is a software component that stores data to serve the data requests in future. It can contain the result of some earlier computations.

3. The two basic types of memory in a computer are _____



a) Primary and major

b) Primary and Secondary
c) Minor and Major
d) Main and virtual

Answer: b
Explanation: There are two types of memories in a computer system: The Primary Memory and the Secondary Memory.
The primary memory can be directly accessed by the CPU whereas the secondary memory cannot be directly accessed.

4. Which of the following is used to hold running program instructions?
a) Primary Storage
b) Virtual Storage
c) Internal Storage
d) Minor Devices

Answer: a
Explanation: The primary storage is responsible for holding the data, intermediate results and the results of ongoing processes or jobs. Virtual storage is the main memory storage required for saving large amount of data for future reference. The other options are invalid.

5. Which of the following is non-volatile storage?
a) Backup
b) Secondary
c) Primary
d) Cache

Answer: b
Explanation: The secondary storage is the non-volatile storage unit because the data is not lost when the power supply is dissipated. Primary memory is the volatile memory.

6. Which of the following is used in main memory?
a) SRAM

b) DRAM
c) PRAM
d) DDR

Answer: b
Explanation: DRAM stands for dynamic random access memory. It is denser than SDRAM (Static) and therefore it is used in the main memory. They are in the form of semiconductor RAMs.

7. Which of the following are types of ROMs?
a) SROM & DROM
b) PROM & EPROM
c) Only one type there is no further classification
d) PROM & EROM

Answer: b
Explanation: There are two types of Read Only Memories: PROM i.e., Programmable ROM & EPROM i.e., Erasable Programmable ROM. When only a small number of ROMs with a particular memory content is needed, PROM is used and in case of EPROM, all the contents of the storage cells must be erased before the write operation.

8. RAID stands for _____
a) Redundant array of independent disks
b) Redundant array of individual disks
c) Reusable Array of independent disks
d) Reusable array of individual disks

Answer: a
Explanation: RAID is a multiple-disk database design which is viewed as a single logical disk by the operating system. Data are distributed across the physical drives of the array. It guarantees the recovery of data in case of data failure.

9. A non-erasable disk that stores digitized audio information is _____
a) CD
b) CD-ROM
c) DVD-R
d) DVD-RW

Answer: a
Explanation: A compact disk stores digitized audio information. The standard system uses 12 cm disks and can record more than 60 minutes of uninterrupted playing game.

10. The first practical form of Random Access Memory was the _____
a) SSEM
b) Cathode Ray Tube
c) William's Tube
d) Thomas's Tube

Answer: c
Explanation: The first practical form of RAM was the William's Tube made in 1947. It stored data as electrically charged spots on the face of a Cathode Ray Tube.

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "The Arithmetic & Logic Unit".

1. The 'heart' of the processor which performs many different operations _____

a) Arithmetic and logic unit
b) Motherboard
c) Control Unit
d) Memory

Answer: a
Explanation: The Arithmetic and logic unit performs all the basic operations of the computer system. It performs all the arithmetic(+,-,*,/,etc) as well as the logical operations(AND, OR, NOT, etc.).

2. ALU is the place where the actual executions of instructions take place during processing operation.

a) True
b) False
---

3. Which of the following is not a bitwise operator?

a) |
b) ^
c) .
d) <<

Answer: c
Explanation: All except the dot(.) operator are bitwise operators.
| : Bitwise OR
^ : Bitwise XOR
<< : Shift Left

4. The sign magnitude representation of -1 is _____

a) 0001
b) 1110

c) 1000
d) 1001

Answer: d
Explanation: The first leftmost bit i.e. the most significant bit in the sign magnitude represents if the number is positive or negative. If the MSB is 1, the number is negative else if it is 0, the number is positive. Here, +1=0001 and for -1=1001.

5. IEEE stands for _____
a) Instantaneous Electrical Engineering
b) Institute of Emerging Electrical Engineers
c) Institute of Emerging Electronic Engineers
d) Institute of Electrical and electronics engineers

Answer: d
Explanation: The IEEE is an organization of professionals in the field of electronics and electrical engineering. IEEE has given certain standards of its own which are followed in the field of computer science and electrical engineering.

6. The ALU gives the output of the operations and the output is stored in the _____
a) Memory Devices
b) Registers
c) Flags
d) Output Unit

Answer: b
Explanation: Any output generated by the ALU gets stored in the registers. The registers are the temporary memory locations within the processor that are connected by signal paths to the CPU.

7. The process of division on memory spaces is called _____
a) Paging
b) Segmentation

c) Bifurcation
d) Dynamic Division

Answer: b
Explanation: The memory space is divided into segments of dynamic size. The programmer is aware of the segmentation and can reallocate the segments accordingly.

8. Number of bits in ALU is _____
a) 4
b) 8
c) 16
d) 2

Answer: c
Explanation: Arithmetic and Logic Unit consists of 16bits. They perform certain Arithmetic and bitwise operations (add, subtract, AND, OR, XOR, Increment, decrement, shift).

9. Which flag indicates the number of 1 bit that results from an operation?
a) Zero
b) Parity
c) Auxiliary
d) Carry

Answer: b
Explanation: The parity flag indicates the number of 1 bits in any operation. The resultant bit is called the parity bit. The main aim of the parity bit is to check for errors.

10. The bitwise complement of 0 is _____
a) 00000001
b) 10000000
c) 11111111

d) 11111110

Answer: c
Explanation: Bitwise complement is basically used to convert all the 0 digits to 1 and the 1s to 0s.
So, for 0 = 00000000(in 8-bits) ::: 11111111(1s complement). The bitwise complement is often referred to as the 1s complement

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "The Control Unit".

1. _____ is the raw material used as input and _____ is the processed data obtained as output of data processing.

a) Data, Instructions
b) Instructions, Program
c) Data, Program
d) Program, Code

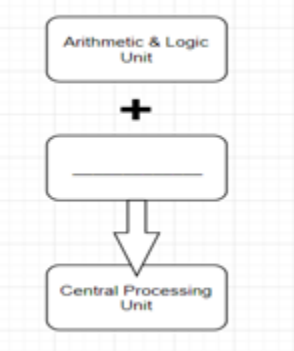
Answer: a
Explanation: Data can be assumed as a raw material which , in turns after processing gives the desired output in the form of instructions. Further, a set of ordered and meaningful instructions is known as a program.

2. Which of the following is not a characteristic of a computer?

a) Diligence
b) I.Q.
c) Accuracy
d) Versatility

Answer: b
Explanation: The Computer system has no I.Q. of its own. It does only what it is programmed to do. It cannot take decisions of its own.
A computer is diligent, because it can work continuously for hours without getting any errors or without getting grumbled.
Accuracy of a computer is consistently high and its level of accuracy depends on its design. A computer can perform any task if, it can be broken down into a series of logical steps. Therefore, a computer is versatile.

3. Fill in the blank in the diagram.



a) Input Unit
b) Memory Unit
c) Control Unit
d) I/O Unit

Answer: c
Explanation: The control unit manages and coordinates the operations of a computer system. The ALU is responsible for performing all the arithmetic and bitwise operations . Therefore, both these units combine to form the brain of the computer ,which is the central processing unit.

4. The part of a processor which contains hardware necessary to perform all the operations required by a computer:
a) Data path
b) Controller
c) Registers
d) Cache

Answer: a
Explanation: A processor is a part of the computer which does all the data manipulation and decision making. A processor comprises of:
A data path which contains the hardware necessary to perform all the operations.
A controller tells the data path what needs to be done.
The registers act as intermediate storage for the data.

5. What does MAR stand for?

a) Main Address Register
b) Memory Access Register
c) Main Accessible Register
d) Memory Address Register

Answer: d
Explanation: MAR is a type of register which is responsible for the fetch operation. MAR is connected to the address bus and it specifies the address for the read and write operations.

6. If the control signals are generated by combinational logic, then they are generated by a type of _____ controlled unit.

a) Micro programmed
b) Software
c) Logic
d) Hardwired

Answer: d
Explanation: The main task of a control unit is to generate control signals. There are two main types of control units:
A hardwired control unit generates control signals by using combinational logic circuits and the Micro programmed control unit generates control signals by using some softwares.

7. Which is the simplest method of implementing hardwired control unit?

a) State Table Method
b) Delay Element Method
c) Sequence Counter Method
d) Using Circuits

Answer: a
Explanation: There are 3 ways of implementing hardwired control unit:
A state table is the simplest method in which a number of circuits are designed based on the cells in the table.

A delay element method consists of a flowchart drawn for the circuit. A D-flip flop is used as a delay element.
A sequence counter method used k-modulo counter as a replacement for k delay elements.

8. A set of microinstructions for a single machine instruction is called _____

a) Program
b) Command
c) Micro program
d) Micro command

Answer: c
Explanation: For every micro-operation, a set of microinstructions are written which indicate the control signals to be activated. A set of microinstructions is a micro program. The address of the next microinstruction is given by a Micro-program counter.

9. Micro-program consists of a set of microinstructions which are strings of 0s and 1s.

a) True
b) False

Answer: a
Explanation: The computer understands only binary language. So, the micro-program should have instructions which are in the form of 0s and 1s. Each output line of the micro-program corresponds to one control signal.

10. A decoder is required in case of a _____

a) Vertical Microinstruction
b) Horizontal Microinstruction
c) Multilevel Microinstruction
d) All types of microinstructions

Answer: a
Explanation: There are two types of microinstructions: Horizontal and Vertical.

In a horizontal microinstruction, each bit represents a signal to be activated whereas, in case of a vertical microinstruction bits are decoded and, the decoder then produces signals

This set of Computer Fundamentals Interview Questions and Answers for freshers focuses on "The Decimal Number System".

1. The value of base in a decimal number system is _____
a) 8
b) 2
c) 10
d) 16

Answer: c
Explanation: A decimal number system consists of 10 digits from 0 to 9.
The definition of base describes it as a quantity to represent the number of digits present in that particular number system.
Therefore, here, the base is 10.

2. Convert : $(110)_2$ = (__)$_{10}$.
a) 4
b) 5
c) 6
d) 9

Answer: c
Explanation: The base 2 represents that the number is binary ,whereas, the base 10 represents that it is to be converted to the decimal format.
Conversion: $2^2 * 1 + 2^1 * 1 + 2^0 * 0 = 6$.

3. The 2's complement of 15 is _____
a) 0000
b) 0001

c) 0010
d) 0100

Answer: b
Explanation: 2's complement is obtained by adding 1 to the 1's complement of the number.
Here, Binary of 15 = 1111
1's complement of 15= 0000
2's complement of 15= 0000+1=0001.

4. Another name for base is _____
a) root
b) radix
c) entity
d) median

Answer: b
Explanation: Another name for base is radix. Base refers to the number of digits that a particular number system consists of.
The base of decimal number system is 10 , binary is 2 and so on.

5. The decimal equivalent of $(0.101)_2$ will be _____
a) 0.5
b) 0.625
c) 0.25
d) 0.875

Answer: b
Explanation: Since the base is 2 , it could be easily guessed that the number is binary. Conversion: $2^{-1} * 1 + 2^{-2} * 0 + 2^{-3} * 1 = 0.625$.

6.The signed magnitude for -3 will be _____
a) 00000011
b) 10000011
c) 11111101
d) 11111100

Answer: b
Explanation: Signed Magnitude of a number is a representation to determine if the number is positive or negative.
If the MSB of a number is 0 , the number is positive , else if it is 1 the number is negative.
Here, +3 = 00000011
-3= 100000011.

7. A number with both integer and a fractional part has digits raised to both positive and negative powers of 2 in a decimal number system.
a) True
b) False

Answer: b
Explanation: In a decimal number system, a number with both integer and a fractional part has digits raised to both positive and negative powers of 10 and not 2.
e.g. $22.34 = 2 * 10^{1} + 2 * 10^{0} + 3 * 10^{-1} + 4 * 10^{-2}$.

8. The hexadecimal representation of 14 is _____
a) A
b) F
c) D
d) E

Answer: d
Explanation: The hexadecimal representations are as follows:
10 : A
11 : B
12 : C
13 : D
14 : E
15 : F.

9. Which of the following is not a decimal number?
a) 114
b) 43.47
c) 99.9A

d) 10101

Answer: c
Explanation: All the numbers except 99.9A are decimal numbers.
This number has a hexadecimal component A in it therefore, it is not a valid decimal number.
The decimal equivalent of A is 10.

10. Select the incorrect option :
a) $(101)_{10} = (1100101)_2$
b) G is valid in hexadecimal system.
c) C represents 12
d) The base of a decimal number system is 10.

Answer: b
Explanation: G is not a valid hexadecimal number. In this system , only representations from A to E are used to represent the numbers from 10 to 15.
The base of the hexadecimal number system is 16

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "The Binary Number System".

1. Which of the following is not a positional number system?
a) Roman Number System
b) Octal Number System
c) Binary Number System
d) Hexadecimal Number System

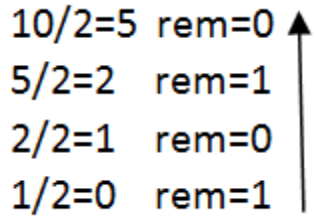
Answer: a
Explanation: The Roman number system isn't a positional number system since , it uses symbols to represent numbers.
The octal number system uses digits from 0-7 , the binary number system uses digits from 0-1 whereas, the hexadecimal number system uses digits from 0-15.

2. The value of radix in binary number system is _____
a) 2
b) 8
c) 10
d) 1

Answer: a
Explanation: In a binary number system, the value of base or radix is 2. The binary system uses only two digits for the representation of numbers, therefore its base id chosen to be 2.

3. The binary equivalent of the decimal number 10 is _____
a) 0010
b) 10
c) 1010
d) 010

Answer: c
Explanation: To get the binary equivalent of any number, we need to divide the number by 2 and obtain the remainders as :



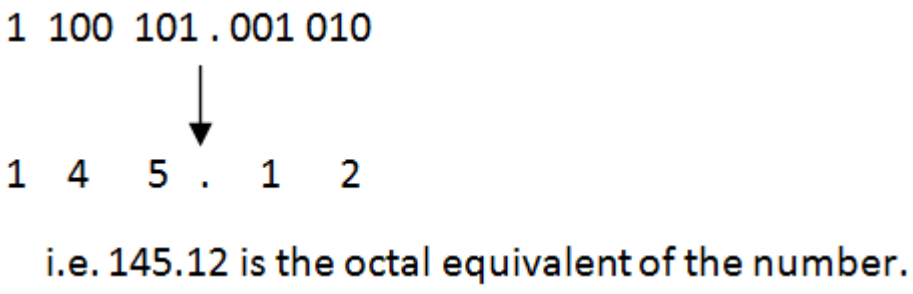
We then write the remainders in the reverse order as 1010 .

4. A computer language that is written in binary codes only is _____
a) machine language
b) C
c) C#
d) pascal

Answer: a
Explanation: Machine Language is written in binary codes only . It can be easily understood by the computer and is very difficult for us to understand. A machine language , unlike other languages requires no translators or interpreters.

5. The octal equivalent of 1100101.001010 is _____
a) 624.12
b) 145.12
c) 154.12
d) 145.21

Answer: b
Explanation: The octal equivalent is obtained by grouping the numbers into three, from right to left before decimal and from right to left after the decimal place. Here,



i.e. 145.12 is the octal equivalent of the number.

6. The input hexadecimal representation of 1110 is _____
a) 0111
b) E
c) 15
d) 14

Answer: b
Explanation: In hexadecimal number system, 1110 = 15, which is represented by the alphabet E.
Some representations are:
A 10
B 11
C 12
D 13
E 14
F 15.

7. A bit in a computer terminology means either 0 or 1.
a) True
b) False

Answer: a
Explanation: A bit stands for a binary digit. A binary digit can have only two digits i.e. 0 or 1. A binary number consisting of n-bits is called a n-bit number.

8. Convert the binary equivalent 10101 to its decimal equivalent.
a) 21
b) 12
c) 22
d) 31

Answer: a
Explanation: To convert a binary number to its decimal equivalent follow these steps :
$2^4 * 1 + 2^3 * 0 + 2^2 * 1 + 2^1 * 0 + 2^0 * 1 = 21$.
Therefore, the answer is 21.

9. Which of the following is not a binary number?
a) 1111
b) 101
c) 11E
d) 000

Answer: c
Explanation: A binary number can have only two possible digits, 0 and 1. In the third option, there is an alphabet E present which makes it an invalid binary number. Alphabets are only allowed in hexadecimal number system.

10. Which of the following is the correct representation of a binary number?
a) $(124)_2$
b) 1110
c) $(110)^2$
d) $(000)_2$

Answer: d
Explanation: The binary numbers should comprise only two digits 0 and 1. Also, for the base, the value should be 2 and it should be written as a subscript enclosing the entire number. Here, the fourth option gives the correct representation

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "Application Softwares".

1. The software designed to perform a specific task:
a) Synchronous Software
b) Package Software
c) Application Software
d) System Software

Answer: c
Explanation: Software refers to a collection of programs. Softwares designed to do a specific task are referred to as the application softwares. Eg. :Inventory management, banking, etc.

2. Word processing software is a type of application software.
a) True
b) False

Answer: a
Explanation: The statement is true. Since, application software are designed to do a specific job, word processing is a type of application software used for the designing of text documents.

3. Developing software _____ means a major commitment of time, money and resources.
a) In-house
b) In-sync
c) On-date
d) On-duration

Answer: a
Explanation: Developing software in-house means the same. It is easier to carry out changes in the software if it is developed in-house

4. Which of the following is not a way of acquiring software?
a) Buying pre-written software
b) Ordering customized software
c) Downloading public-domain Software

d) Duplicating the software

Answer: d
Explanation: Duplication is not a correct way of acquiring the software. All the other options are valid. Apart from these, another option could be development of a customized software.

5. OSS stands for:
a) Open System Service
b) Open Source Software
c) Open System Software
d) Open Synchronized Software

Answer: b
Explanation: OSS stands for open source software. OSS allows any user to download, view, modify and redistribute the software. Also, the user can fix bugs according to needs.

6. Public domain software is usually:
a) System supported
b) Source supported
c) Community supported
d) Programmer supported

Answer: c
Explanation: The public domain software is generally community supported. It is community supported as author does not support users directly.

7. Set of programs which consists of full documentation.
a) Software Package
b) System Software
c) Utility Software
d) File package

Answer: a
Explanation: It is called a software package. A software is nothing but a collection

of programs. A software package can solve a specific problem or perform a specific type of job.

8. Interpreter is used as a translator for _____
a) Low level language
b) High Level Language
c) COBOL
d) C

Answer: b
Explanation: It is generally used to make the code into an machine understandable format. Interpreter is used with the high level languages similarly. Assembler is used in case of low level languages.

9. What do you call a a specific instruction designed to do a task?
a) Command
b) Process
c) Task
d) Instruction

Answer: a
Explanation: A program is a set of instructions. A command is given to do a specific job. A program in execution is called a process.

10. They normally interact with the system via user interface provided by the application software.
a) Programmers
b) Developers
c) Users
d) Testers

Answer: c
Explanation: Users interact with the system via user interface that is given by the application software. An application software is a set of instructions designed to serve a particular purpose

This set of Computer Fundamentals online test focuses on "Machine Languages".

1. The language made up of binary coded instructions.
a) Machine
b) C
c) BASIC
d) High level

Answer: a
Explanation: The language made up of binary coded instructions built into the hardware of a particular computer and used directly by the computer is machine language.

2. Binary code comprises of digits from 0 to 9.
a) True
b) False

Answer: b
Explanation: The statement is false. Binary as the word suggests contains only 2 digits : 0 and 1.
0 denotes false and 1 denotes a truth value.

3. The _____ contains the address of the next instruction to be executed.
a) IR
b) PC
c) Accumulator
d) System counter

Answer: b
Explanation: PC stands for program counter (It contains the address of the next instruction to be executed).

4. The memory unit is made up of _____ bytes.
a) 256
b) 124
c) 4096

d) 3096

Answer: c
Explanation: The memory unit is made up of 4,096 bytes. Memory unit is responsible for the storage of data. It is an important entity in the computer system.

5. A document that specifies how many times and with what data the program must be run in order to thoroughly test it.
a) addressing plan
b) test plan
c) validation plan
d) verification plan

Answer: b
Explanation: Test plan is the A document that specifies how many times and with what data the program must be run in order to thoroughly test it. It comes under testing.

6. An approach that designs test cases by looking at the allowable data values.
a) Maintenance
b) Evaluation
c) Data coverage
d) Validation

Answer: c
Explanation: Data coverage is the term used. It is responsible for designing the test cases.

7. The formal grammar rules governing the construction of valid instruction.
a) test case
b) syntax
c) program
d) semantics

Answer: b
Explanation: Syntax determines the grammatical rules in a code. Semantics give meaning to the instructions.

8. A program that reads each of the instructions in mnemonic form and translates it into the machine-language equivalent.
a) Machine language
b) Assembler
c) Interpreter
d) C program

Answer: b
Explanation: Assembler does this job. A language that uses mnemonic codes for the representation of machine-language instructions is called assembly language.

9. An approach that designs test cases by looking at the allowable data values.
a) Data coverage
b) Code Coverage
c) Debugging
d) Validation

Answer: a
Explanation: Data coverage is an approach that designs test cases by looking at the allowable data values. Code coverage is an approach that designs test cases by looking at the code.

10. The rules that give meaning to the instructions.
a) Semantics
b) Syntax
c) Code
d) Cases

Answer: a
Explanation: The answer is semantics. They are the rules that give meaning to the instructions. Syntax is the formal rules that ensure validation of code

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "System Software's".

1. The physical devices of a computer:
a) Software
b) Package
c) Hardware
d) System Software

Answer: c
Explanation: Hardware refers to the physical devices of a computer system. Software refers to a collection of programs. A program is a sequence of instructions.

2. Software Package is a group of programs that solve a multiple problems.
a) True
b) False

Answer: b
Explanation: The statement is false. Software package is a group of programs that solve a specific problem or perform a specific type of job.

3. _____ refer to renewing or changing components like increasing the main memory, or hard disk capacities, or adding speakers, or modems, etc.
a) Grades
b) Prosody
c) Synthesis
d) Upgrades

Answer: d
Explanation: Upgrades is the right term to be used. Upgrades are installed to renew or implement a new feature. Except for upgrades, hardware is normally one-time expense.

4. Which of the following is designed to control the operations of a computer?
a) Application Software
b) System Software
c) Utility Software

d) User

Answer: b
Explanation: Software is basically classified into two :System and application. System Software is designed to control the operations and extend the processing capability of a computer system.

5. Which of the following is not an example of system software?
a) Language Translator
b) Utility Software
c) Communication Software
d) Word Processors

Answer: d
Explanation: A system software is responsible for controlling the operations of a computer system. Word Processor is an application software since it is specific to its purpose.

6. A person who designs the programs in a software package is called :
a) User
b) Software Manager
c) System Developer
d) System Programmer

Answer: d
Explanation: The programs included in a system software package are called system programs. The programmers who design them and prepare them are called system programmers.

7. _____ is designed to solve a specific problem or to do a specific task.
a) Application Software
b) System Software
c) Utility Software
d) User

Answer: a
Explanation: An application software is specific to solving a specific problem. System software is designed for controlling the operations of a computer system.

8. Assembler is used as a translator for?
a) Low level language
b) High Level Language
c) COBOL
d) C

Answer: a
Explanation: Assembler is used in case of low level languages.It is generally used to make the binary code into an understandable format. Interpreter is used with the high level languages similarly.

9. What do you call a program in execution?
a) Command
b) Process
c) Task
d) Instruction

Answer: b
Explanation: Option Process is correct. A program is a set of instructions. A program in execution is called a process.

10. Which of the following is not a process state?
a) Terminated
b) Running
c) Blocked
d) Execution

Answer: c
Explanation: There is no blocked state in a process model. The different states are ready, running, executing, waiting and terminated

This set of Computer Fundamentals Multiple Choice Questions & Answers (MCQs) focuses on "Algorithms".

1. The word _____comes from the name of a Persian mathematician Abu Ja'far Mohammed ibn-i Musa al Khowarizmi.
a) Flowchart
b) Flow
c) Algorithm
d) Syntax

Answer: c
Explanation: The word algorithm comes from the name of a Persian mathematician Abu Ja'far Mohammed ibn-i Musa al Khowarizmi.

2. In computer science, algorithm refers to a special method useable by a computer for solution of a problem.
a) True
b) False

Answer: a
Explanation: The statement is true. This word algorithm refers to a special method useable by a computer for solution of a problem. The statement of the problem specifies in general terms the desired input/output relationship.

3. This characteristic often draws the line between what is feasible and what is impossible.
a) Performance
b) System Evaluation
c) Modularity
d) Reliability

Answer: a
Explanation: Algorithms help us to understand scalability. Performance often draws the line between what is feasible and what is impossible.

4. The time that depends on the input: an already sorted sequence that is easier to sort.
a) Process

b) Evaluation
c) Running
d) Input

Answer: c
Explanation: The running time depends on the input: an already sorted sequence is easier to sort. The running time is given by the size of the input, since short sequences are easier to sort than the longer ones. Generally, we seek upper bounds on the running time, because it is reliable.

5. Which of the following is incorrect?
Algorithms can be represented:
a) as pseudo codes
b) as syntax
c) as programs
d) as flowcharts

Answer: b
Explanation: Representation of algorithms:
-As programs
-As flowcharts
-As pseudo codes.

6. When an algorithm is written in the form of a programming language, it becomes a _____
a) Flowchart
b) Program
c) Pseudo code
d) Syntax

Answer: b
Explanation: An algorithm becomes a program when it is written in the form of a programming language. Thus, any program is an algorithm.

7. Any algorithm is a program.
a) True
b) False

Answer: b
Explanation: The statement is false. An algorithm when represented in the form of a programming language is called a program. Any program is an algorithm but the reverse is not true.

8. A system wherein items are added from one and removed from the other end.
a) Stack
b) Queue
c) Linked List
d) Array

Answer: b
Explanation: In a queue, the items are inserted from the rear end and deleted from the front end.

9. Another name for 1-D arrays.
a) Linear arrays
b) Lists
c) Horizontal array
d) Vertical array

Answer: a
Explanation: Linear arrays are the 1-Dimensional arrays wherein only one row is present and the items are inserted.

10. A data structure that follows the FIFO principle.
a) Queue
b) LL
c) Stack
d) Union

Answer: c
Explanation: The answer is Stack. A stack follows the FIFO principle. FIFO stands for First In First Out

This set of Tricky Computer Fundamentals Questions and Answers focuses on "Flowcharting Rules".

1. A _____ is diagram that depicts the flow of a program.
a) Algorithm
b) Hash Table
c) Graph
d) Flowchart

Answer: d
Explanation: A flowchart is a diagram that helps us determine the flow of the program. Other options are irrelevant.

2. Terminals are represented by diagonals in a flowchart.
a) True
b) False

Answer: b
Explanation: The statement is false. Terminals are represented by rounded rectangles. They indicate the starting or ending point in a flowchart.

3. The operation represented by parallelograms.
a) Input/Output
b) Assignment
c) Comparison
d) Conditions

Answer: a
Explanation: The input/output operations are represented by parallelograms. They generally are used to display messages during input and output part of a program.

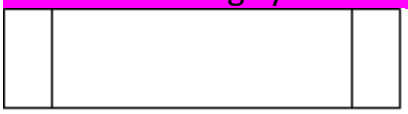
4. Which of the following is not a flowchart structure?
a) Process
b) Sequence
c) Repetition
d) Case

Answer: a
Explanation: There are basically four flowcharting structures:
• Decision
• Repetition
• Case
• Sequence.

5. The action performed by a _____ structure must eventually cause the loop to terminate.
a) sequence
b) case
c) repetition
d) process

Answer: c
Explanation: The action performed by a repetition structure must eventually cause the loop to terminate. Otherwise, an infinite loop is created.

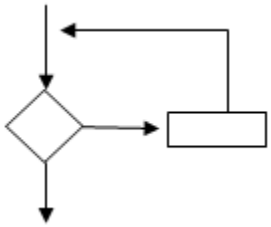
6. The following symbol denotes:



a) Module
b) Terminal
c) Process
d) i/o operation

Answer: a
Explanation: This symbol is that of a module. The terminal is denoted by a rounded rectangle. I/O operation by a parallelogram and process by a rectangle.

7. What type of structure is this?

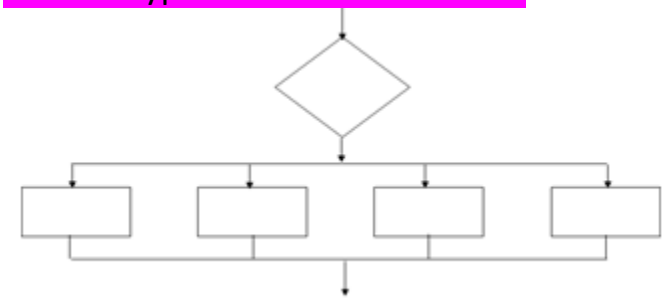


a) sequence
b) case

c) repetition
d) process

Answer: c
Explanation: This is a repetition structure. The action performed by a repetition structure must eventually cause the loop to terminate. Otherwise, an infinite loop is created.

8. What type of a structure is this?



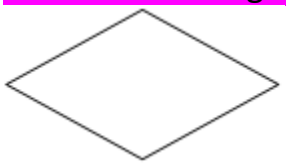
a) sequence
b) case
c) repetition
d) process

Answer: b
Explanation: This is a case structure. Certain cases are given along with a default case in the case structure.

9. An _____ is a connector showing the relationship between the representative shapes.
a) line
b) arrow
c) Process
d) box

Answer: b
Explanation: Arrows are the connectors that show the relationship between different shapes. They also show the flow of the program.

10. The following box denotes?



a) Decision
b) Input/Output
c) Process
d) Module

Answer: a
Explanation: The answer is decision. Conditions are given in this box and then the result is checked accordingly if the condition is true or false.