Batch 3: Week 1 Assessment

**.**

***1 point***

---------------- is the use of two or more CPUs (processors) within a single Computer system.

1. Multiprogramming
2. Multitasking
3. Multiprocessing
4. Multiprogramming

Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Multiprocessing*

***1 point***

The third generation computer used

1. Vacuum Tubes
2. Transistors
3. Integrated Circuits
4. Microprocessor

Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Integrated Circuits*

***1 point***

Which one refers to the digital computer? Select the best answer.

1. It uses 0 and 1 for data representation
2. It is used primarily in scientific applications
3. It represents the decimal numbers through a string of binary digits
4. All the options given

Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All the options given*

***1 point***

To compare the processing speeds of two or more computers, we use this terminology. What is the terminology?

1. MPS
2. MIPS
3. EPS
4. EIPS

Yes, the answer is correct.  
Score: 1

Accepted Answers:

*MIPS*

***1 point***

Select the incorrect statement about system software.

 It is software employed in the development process



 It is used to repair or enhance the other programs used in computer



 It is used to create, debug and maintain programs



 Microsoft office is the best example for system software



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Microsoft office is the best example for system software*

***1 point***

Identify the type of data processed in analog computers.

 Discrete type of data



 intermittent type data



 Discretely varying data



 Continuously varying data



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Continuously varying data*

***1 point***

IBM 360 belongs to -------------

 first generation computers



 second generation



 third generation



 fourth generation



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*third generation*

***1 point***

The following type of computer is very popular with travelers because it can be operated on battery power

 Desktop computer



 Laptop



 Mainframe computer



 Super computer



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Laptop*

***1 point***

Sand table consisted three grooves in the sand with maximum of ------- pebbles in each

 10



 15



 50



 100



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*10*

***1 point***

------------- worked by system of gears and wheels

 Abacus



 Slide Rule



 Pascaline



 Stepped Reckoner



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*Stepped Reckoner*

Batch 3: Week 2 Assessment

***1 point***

Òverflow will occur when

 If we add a positive number to a negative number



 if we do subtraction among two numbers of the same sign



 if we add two numbers of the same sign



 for all type binary operations



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*if we add two numbers of the same sign*

***1 point***

What is the minimum value that can be represented by a signed bit method of 8 bits

 127



 128



 -127



 -128



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*-127*

***1 point***

What is the 2's complement of the decimal number 50 ?

 11110



 1110



 1101



 11001



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*1110*

***1 point***

Which statement is incorrect about Non-Positional number system?

 It has no symbol for zero



 It is very difficult to perform the addition or any other arithmetic operations



 No logical or positional techniques are used in this system



 Decimal number system is the example for Non-Positional number system



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Decimal number system is the example for Non-Positional number system*

***1 point***

The Basis or Radix refers to

 The number of digits in any number



 The number of symbols used in the system



 The minimum value of the number system



 None of the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*The number of symbols used in the system*

***1 point***

The main disadvantage Binary number system is

 It is easier for the hardware to represent the data since it has to deal with only two numbers



 Most of the modern computer systems are operating by using this system



 Large number of digits have to be used to represent numerical values



 All the options given are correct



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Large number of digits have to be used to represent numerical values*

***1 point***

The applications of Hexadecimal number format are

 Memory address representaion



 Color value representation in web design



 MAC address format in computer network



 All the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All the options given*

***1 point***

The equivalent Hexadecimal number for the Binary value 10111100001 is

 5E3



 1E5



 5E2



 All the options are incorrect



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All the options are incorrect*

***1 point***

The equivalent Octal value for the Hexadecimal value 6FD is

 3333



 3375



 3753



 5733



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*3375*

***1 point***

What is the answer for the binary arithmetic (1010111)+(1000101)?

 10111100



 10011101



 10011100



 10011111



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*10011100*

Batch 3: Week 3 Assessment

***1 point***

Select the incorrect statement about EBCDIC code

 It is developed by IBM to use in IBM mainframes



 It is the combination of zone pattern and digit pattern



 It is the abbreviation of Extended BCD Interchange Code



 128 symbols can be represented by EBCDIC code



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*128 symbols can be represented by EBCDIC code*

***1 point***

The universal gates are

  NAND,NOR,XOR



  NAND,NOR



 XOR, XNOR



 None of the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*NAND,NOR*

***1 point***

The Gate that is also known as inverter is

 NAND gate



 NOR gate



 NOT gate



 XOR



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*NOT gate*

***1 point***

You are designing an AND gate. To generate 1 the inputs of the gate should be------

 At least one input is HIGH



 At least one input is LOW.



 All inputs are LOW



 All inputs are HIGH



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All inputs are HIGH*

***1 point***

Truth table is used to express

  boolean algebra



  boolean function



  boolean operators



 None of the options given



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*boolean function*

***1 point***

A digital circuit can be made using only \_\_ Gate in the place of every other gate

 NAND



 AND



 OR



 NOT



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*NAND*

***1 point***

The following gates are using to construct an Exclusive-OR (XOR) gate. Select the best option

 OR gates only



 AND gates and OR gates



 OR gates and NOT gates



 OR gates, AND gates and NOT gates



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*OR gates, AND gates and NOT gates*

***1 point***

Consider an Exclusive-NOR gate with two inputs. It gives high output under the following condition.

 When both the inputs are the same



 Only when both the inputs are low



 Only when both the inputs are high



 When one input is high and the other is low



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*When both the inputs are the same*

***1 point***

What is 4-bit-BCD code for the decimal 3740?

 0011011101001000



 0011011101000000



 1011011101000000



 0111011101000000



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*0011011101000000*

***1 point***

The ASCII code and its corresponding binary value of for the symbol 't' are

 117 and 01110100



 116 and 01110100



 117 and 01110101



 116 and 01110101



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*116 and 01110100*

Batch 3: Week 4 Assessment

Select the correct statement about memory

 Memory unit is the collection of storage units or devices together



 The memory unit stores the binary information in the form of bits



 To refer any value memory address will be used



 All the given options are correct



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All the given options are correct*

***1 point***

The average time required to reach the location in memory and obtain its content is called

 Turnaround time



 Seek time



 Transfer time



 Access time



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Access time*

***1 point***

Which one refers to the digital computer? Select the best answer.

 It uses 0 and 1 for data representation



 It is used primarily in scientific applications



 It represents the decimal numbers through a string of binary digits



 All the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All the options given*

***1 point***

The following type of memory will loose all its contents when power is switched off.

 Volatile memory



 Non-Volatile memory



 Auxiliary memory



 Secondary storage devices



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Volatile memory*

***1 point***

What is the range of refreshing rate of DRAM?

 10-1000 ms



 10-50 ms



 10-100 ms



 10-500 ms



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*10-100 ms*

***1 point***

Which type of memory supports reading data and doesn't support writing?

 `Random Only Memory



 Random Access Memory



 Read Only Memory



 None of the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Read Only Memory*

***1 point***

Which one is not known as type of computer memory?

 DRAM



 SRAM



 EPROM



 FROM



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*FROM*

***1 point***

\_\_\_\_\_\_\_\_\_ contains blank memory at the time of manufacturing

 EROM



 PROM



 DROM



 None of the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*PROM*

***1 point***

Primary memory or main memory is used to store\_\_\_\_\_\_\_\_\_

 Data only



 Data and Calculations only



 Program and calculations only



 Data, Calculations and Programs



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Data, Calculations and Programs*

***1 point***

Select the fastest memory among the following group

 Cache memory



 DRAM



 SRAM



 Registers



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Registers*

Batch 3: Week 5 Assessment

***1 point***

Which of the below is not an example of input device?

  Keyboard



 Digitizer



  Scanner



  Projector



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Projector*

***1 point***

MICR is

 Magnetic Ink character recognition



  Magnetic Ink Character Recorder



  Magnetic Ink Code Recognition



 Magnetic Ink Code Recorder



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Magnetic Ink character recognition*

***1 point***

Joy stick is used for

 drawing



 flight simulator



 video games



 graphics



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*video games*

***1 point***

The primary functions of I/O modules are

 control



 error detection



 CPU communication



 all of the options given



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*CPU communication*

***1 point***

The following device which used for converting maps, pictures and drawings into digital form for storage in computers is called?

 scanner



 MICR



 digitizer



 OCR



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*digitizer*

***1 point***

The following device which used for converting maps, pictures and drawings into digital form for storage in computers is called?

 scanner



 MICR



 digitizer



 OCR



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*digitizer*

***1 point***

Which is/are an example of pointing device(s)?

 Pointer



 Cursor



 Mouse



 All the options given



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*All the options given*

***1 point***

Which one of the following is not a secondary storage?



CD



DVD



magnetic disks



none of the options given

Yes, the answer is correct.  
Score: 1

Accepted Answers:

*none of the options given*

***1 point***

A floppy disk can store up to



1.44 MB



2 MB



8.2 GB

 13GB



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*1.44 MB*

***1 point***

In Magnetic disks, data recorded on and later retrieved from the disk via a conducting coil known as



sector



head



track

 cylinder



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*head*

Batch 3: Week 6 Assessment

***1 point***

The higher the resolution of a monitor, the

 larger the pixels



 further apart the pixels



 less clear the screen



 closer together the pixels



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*closer together the pixels*

***1 point***

Which is true about impact printers?

 strike a ribbon against the paper to produce character images



 includes ink-jet and thermal devices



 are more expensive than laser printer



 use optical technology



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*strike a ribbon against the paper to produce character images*

***1 point***

Which of the following is not a part of a digitizer?

 digitizing tablet



 cursor



 stick



 stylus



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*stick*

***1 point***

In order to reproduce sound the compact disk audio player use a

 quartz crystal



 titanium needle



 laser beam



 barium titanium ceramic



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*laser beam*

***1 point***

In general which one of the following is the best quality printer?

 dot matrix



 ink-jet



 desk-jet



 laser



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*laser*

***1 point***

Which output device of a computer used for producing highly accurate, very large drawings and poster?

 printer



 plotter



 projector



 monitor



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*plotter*

***1 point***

The page printers are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ speed non-impact printers

 slow



 medium



 average



 high



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*slow*

***1 point***

RAID is abbreviated as

 Redundant Array of Independent Disk



 Redundant Array of Inter dependent Disk



 Redundant Array of Inclusive Disk



 Redundant Array of Interchanging Disk



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Redundant Array of Independent Disk*

***1 point***

Pits and ridges is present in

 hard disk



 floppy disk



 DVD



 pen drive



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*DVD*

***1 point***

The number of Tracks and sectors in a disk is

 same



 less than



 more than



 no connection between them



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*no connection between them*

Batch 3: Week 7 Assessment

***1 point***

We can use Top-Down approach for

 identification of fault in the program



 developing solution to a problem



 testing and validating the program



 reverse engineering process



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*developing solution to a problem*

***1 point***

----------is set of explicit and unambiguous instructions written in a programming language. Select the best answer.

 Pseudo code



 Program



 Algorithm



 Flowchart



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*Program*

***1 point***

Which  of the following strategy is combines optimal solutions to non-overlapping problems to solve a problem

 Dynamic programming



 Recursion



 Divide and conquer



 Greedy



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*Divide and conquer*

***1 point***

Algorithm should follow programming language for syntax or feature.

 True



 False



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*False*

***1 point***

We have the following four phases in problem solving.

a. Identifying the initial module,   
b. Defining the problem,   
c. Using set of specific examples,   
d. Understanding the similarities among problems

Select the correct order of problem solving phases.

 a-> b -> c -> d



 b -> a -> c -> d



 d -> a -> c -> b



 d -> b -> a-> c



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*b -> a -> c -> d*

***1 point***

Flowcharts are return with program flow from the

 top to bottom



 bottom to top



 left to right



 right to left



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*top to bottom*

***1 point***

In a flowchart how symbols are connected?

 symbols do not get connected together in a flowchart



 with lines and an arrow to show the direction of flow



 With dashed lines and numbers



 with solid lines to link events



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*with lines and an arrow to show the direction of flow*

***1 point***

Pseudocode is a method of describing

 instructions



 algorithm



 program



 flow chart



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*algorithm*

***1 point***

What does an arrow represent in a flow chart?

 decision making



 data flow



 program execution



 start



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*data flow*

***1 point***

What is the difference between a flowchart and pseudocode?

 A flowchart is diagrammatic while pseudocode is written in a programming language (eg. Pascal or Java)



 A flowchart is textual but pseudocode is diagrammatic



 A flowchart is a diagrammatic description of an algorithm while pseudocode is a textual description of an algorithm



 A flowchart and pseudo code are the same thing



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*A flowchart is a diagrammatic description of an algorithm while pseudocode is a textual description of an algorithm*

***1 point***

The operation represented by parallelograms

 I/O



 assignment



 comparison



 conditions



Yes, the answer is correct.  
Score: 1

Accepted Answers:

*I/O*

***1 point***

Circles can be used to combine

 rectangle



 diamond



 arrow



 flow lines



No, the answer is incorrect.  
Score: 0

Accepted Answers:

*flow lines*

# Batch 3: Week 8 Assessment

**1 point**

In computer world the following is(are) the basic algorithm(s). Multiple options may be correct.

 Counting



 Multiplication of two numbers



 Summation of n numbers



 Finding square root of given number



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*Counting*

*Summation of n numbers*

**1 point**

The swapping two variables' values can be done without any other temporary variable.

 True



 False



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*True*

**1 point**

Consider the values a=100 and b=200. After executing the following instructions  
  
a=b;  
b=a;  
a=b;  
  
the values of b and a are

 200, 100



 100, 100



 100, 200



 200, 200



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*200, 200*

**1 point**

An algorithm consist of  an iterative construct as follows

1. Read the mark.
2. Test for the condition (mark>40) and increase the count if needed
3. Do the iteration for all students

The algorithm will

 read the students record



 count the number of marks



 count the number of marks which are greater than 40



 read only the marks which are greater than 40



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*count the number of marks which are greater than 40*

**1 point**

The application of sum of n numbers is

 pattern recognition



 searching



 sorting



 average and variance calculations



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*average and variance calculations*

**1 point**

 What is the smallest problem in sum of n integers?

 n=0



 n=1



 n=n



 n=n-1



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*n=0*

**1 point**

How many additions must be performed to sum n numbers?

 n



 n+1



 n-1



 2n



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*n-1*

**1 point**

0! = ?

 0



 1



 undefined



 none of the mentioned



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*1*

**1 point**

The applications of Factorial calculation problem are

 searching and sorting



 average and variation calculations



 probability and statistical calculations



 none of the above



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*probability and statistical calculations*

**1 point**

The general form of factorial calculation for the given number n

 n!=1\*2\*3\*…….\*n-1



 n!=1\*2\*3\*…….\*n-1\*n/2



 n!=1\*2\*3\*…….\*n-1\*n/n



 n!=1\*2\*3\*…….\*n-1\*n



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*n!=1\*2\*3\*…….\*n-1\*n*

# Batch 3: Week 9 Assessment

**1 point**

To compute the sine function we use the powers and the factorial follow the sequence:

 1,2,3,4,5,.....



 2,4,6,8,10......



 1,3,5,7,9......



 1,3,5,7,1,3,5,7,1,3,5,7,......



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*1,3,5,7,9......*

**1 point**

The following is(are) the application(s) of Sine function.

 To describe the light wave



 Sorting of n numbers



 Searching of element in an array



 To find the distances in architecture



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*To describe the light wave*

*To find the distances in architecture*

**1 point**

A series in which each of the successors is the sum of its previous two predecessors

 fn = fn + fn-1



 fn = fn+1 + fn+2



 fn = fn-1 + fn-2



 fn = fn + fn+2



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*fn = fn-1 + fn-2*

**1 point**

Fibonacci series has practical application in

 list



 stack



 queue



 sorting and searching



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*sorting and searching*

**1 point**

Suppose the first fibonnaci number is 0 and the second is 1. What is the sixth fibonnaci number?

 5



 6



 7



 8



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*5*

**1 point**

Which of the following methods can be used to find the nth fibonnaci number?

 dynamic programming



 recursion



 iteration



 all of the mentioned



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*all of the mentioned*

**1 point**

Which one of the following series is the correct one regarding sin x computation?



Sin( x) = 1 – (x2 / 2 !) + (x4 / 4 !) – (x6 / 6 !)+...



Sin( x) = (x/1!) – (x2 / 2 !) + (x4 / 4 !) – (x6 / 6 !)+...



Sin( x) = (x/1!) + (x3 / 3 !) + (x5 / 5 !) + (x7 / 7 !)+...



Sin( x) = (x/1!) – (x3 / 3 !) + (x5 / 5 !) – (x7 / 7 !)+...

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*Sin( x) = (x/1!) – (x3 / 3 !) + (x5 / 5 !) – (x7 / 7 !)+...*

**1 point**

The number of steps to reverse the digits in an integer is directly proportional to the

 Sum of the digits



 Number of digits in the integer



 Sum of integer and reversed integer



 Sum of digits in reversed integer



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*Number of digits in the integer*

**1 point**

Hashing and information retrieval, data base applications are some of the applications of

 Sine function computation



 Fibonacci computation



 Reversing the digits of an integer



 Base conversion



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*Reversing the digits of an integer*

**1 point**

Assume that r represents the base of a number in number system. The digits which are allowed in number representation are

 All the digits from 1 to r



 Digits from 0 to r-1



 All the digits from 0 to r



 No restriction in digits



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*Digits from 0 to r-1*

# Batch 3: Week 10 Assessment

**1 point**

The determinant in a quadratic equation can be used to find

 roots are real and equal



 roots are real and distinct



 roots are imaginary and distinct



 roots can not be determined



### Partially Correct. Score: 0.66

### Accepted Answers:

*roots are real and equal*

*roots are real and distinct*

*roots are imaginary and distinct*

**1 point**

Which loop is used when number of iteration can not be predetermined and loop terminating condition to be tested before entering the loop? 

 for



 while



 do while



 both while and do while



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*while*

**1 point**

What does the next statement in loop do?

 skip the current iteration



 exit the loop



 skip the current line of the loop



 starts the next loop by ending the current loop



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*skip the current iteration*

**1 point**

Which of the following while condition stop the loop when the value in the age variable is less than the number 0?

 age > 0



 age >= 0



 age < 0



 age <= 0



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*age >= 0*

**1 point**

What is the limit of the variable i in the loop which is used for checking whether a number is prime or not?

 1



 n



 n/2



 n-1



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*n/2*

**1 point**

In a program for sum of n number which loop construction is used

 for



 while



 do while



 all of the above



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*all of the above*

**1 point**

If determinant is negative  in a quadratic equation, then

 the roots are real



 the roots are real and equal



 the roots are real and  unequal



 the roots are imaginary



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*the roots are imaginary*

**1 point**

Which loop can be used to execute at least one time?

 for



 while



 do while



 both while and do while



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*do while*

**1 point**

What are the things need to consider in loop construction?

 initialization



 condition for termination



 invariant relation



 increment or decrement



### Partially Correct. Score: 0.75

### Accepted Answers:

*initialization*

*condition for termination*

*invariant relation*

*increment or decrement*

**1 point**

A quadratic equation has

 3 roots at the maximum



 2 roots at the maximum



 1 root always



 no imaginary parts in the equation



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*2 roots at the maximum*

# Batch 3: Week 11 Assessment

**1 point**

Square root can be found for only perfect square numbers

 true



 false



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*false*

**1 point**

Sum of squares of two numbers is 145. If square root of one number is 3, find the other number

 8



 9



 64



 136



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*8*

**1 point**

For which number we cant find LCM?

 odd



 even



 prime



 irrational



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*irrational*

**1 point**

Which of the following is a strong number?

 142



 143



 144



 145



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*145*

**1 point**

Identify the numbers which are Armstrong , strong , perfect number respectively.

 153,6,2



 145,6,3



 153,4,1



 145,6,1



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*153,6,2*

**1 point**

The prime factors of number 10 is

 1,2,5,10



 2,5



 1,10



 1,5



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*2,5*

**1 point**

If a,b,c is a perfect number then, the sum of the factors includes

 all factors



 factors other than 1



 factors other than the number



 factors other than number and 1



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*factors other than the number*

**1 point**

 If xyz is a strong number then

 x!+y!+z!=0



 x!+y!+z!=sum of x, y and z



 x!+y!+z!=xyz!



 x!+y!+z!=xyz



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*x!+y!+z!=xyz*

**1 point**

The square root of a number used to compute

 cipher key



 geometric mean



 reciprocal of a number



 GCD



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*geometric mean*

*reciprocal of a number*

**1 point**

The smallest divisor of an integer is used in

 allocation problems



 data security



 fraction reduction



 game playing



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*allocation problems*

# Batch 3: Week 12 Assessment

**1 point**

Pseudorandom numbers are used in

 games



 simulation problems



 fraction reduction



 allocation problems



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*games*

*simulation problems*

**1 point**

How many factors does a prime a number have?

 1



 2



 3



 depends on the number



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*2*

**1 point**

To generate the prime numbers between any two integers n1 and n2, a looping construct is mandatory.

 true



 false



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*false*

**1 point**

What is the limit of the variable i in the loop which is used for checking whether a number is prime or not?

 n



 n-1



 n+1



 n/2



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*n/2*

**1 point**

Following algorithm determines

 Declare variables i, a,b , show  
 Initialize the variables, a=0, b=1, and show =0  
 Enter the number of terms  
 Print First two terms of series  
 Use loop for the following steps  
 show=a+b  
 a=b   
 b=show  
 increase value of i each time by 1  
 print the value of show

 finding GCD of two numbers



 finding Fibonacci series



 find all the prime numbers between two



 finding smallest divisor of an integer



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*finding Fibonacci series*

**1 point**

Which of the following is a prime number?

 0



 1



 7



 10



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*7*

**1 point**

Random number function has initial value, which is called as

 root element



 seed element



 initial element



 first element



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*seed element*

**1 point**

Which of the following is example of random number?

 tossing a coin



 choosing a card from a deck



 rolling a dice



 all of the above



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*all of the above*

**1 point**

The property of random number is

 repetitive



 deterministic



 infinite



 all of the above



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*deterministic*

**1 point**

The return value of a random number function is

 integer



 float



 char



 string



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*integer*

# Batch 3: Week 13 Assessment

**1 point**

The elements of an array are different data type

 True



 False



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*False*

**1 point**

The information about an array used in program will be stored in

 table



 record



 dope vector



 all of the above



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*dope vector*

**1 point**

The parameter passing mechanism for an array is

 call by value



 call by reference



 call by value-result



 none of the above



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*call by reference*

**1 point**

What is the maximum number of dimensions an array in C may have?

 two



 six



 nine



 no limit, the only practical limits are memory size and compilers



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*no limit, the only practical limits are memory size and compilers*

**1 point**

The Object array is created in

 ROM



 heap memory



 stack memory



 HDD



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*heap memory*

**1 point**

Which of the following statement is true about an array?

 An array is a series of elements of the same type in contiguous memory locations



 An array is a series of element



 An array is a series of elements of the same type placed in non-contiguous memory locations



 An array is an element of the different type



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*An array is a series of elements of the same type in contiguous memory locations*

**1 point**

The sixth element of an array is accessed by

 array{6}



 array[6]



 array{5}



 array[5]



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*array[5]*

**1 point**

An array index starts with

 -1



 0



 1



 all of the above



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*0*

**1 point**

What are the types of arrays?

 int, float,double,string



 char



 struct,enum



 all of the above



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*all of the above*

**1 point**

Given the following:

int[][] myarray =

  { {0, 1, 3, 4},

    {4, 3, 88, 0, 7 },

    {3, 2} } ;

Which of the following statements replaces the 88 with 55?

 myarray[1][2] = 55;



 myarray[2][1]=55;



 myarray[ 88 ] = 55;



 myarray[2][3] = 55;



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*myarray[1][2] = 55;*

# Batch 3: Week 14 Assessment

**1 point**

Which of the following examples represent the worst case input for an insertion sort?

 array in sorted order



 array sorted in reverse order



 normal unsorted array



 large array



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*array sorted in reverse order*

**1 point**

For array 17 16 3 13 6, find after three iterations of selection sort algorithm

 3 6 13 17 16



 3 6 13 17 16



 3 6 16 13 17



 3 6 17 13 16



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*3 6 17 13 16*

**1 point**

The real time example of an  insertion sort is

 arranging a pack of playing cards



 database scenarios and distributes scenarios



 arranging books on a library shelf



 real-time systems



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*arranging a pack of playing cards*

**1 point**

What will be the number of passes to sort the elements using insertion sort?

14, 12, 16, 6, 3, 10

 4



 5



 6



 7



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*5*

**1 point**

The strategy of selection sort is finding the ---------- value in an array

 minimum



 maximum



 minimum or maximum



 pivotal



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*minimum or maximum*

**1 point**

One factor to consider when deciding on a sorting algorithm is the amount of memory required to perform the sort

 True



 False



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*True*

**1 point**

How many passes does an insertion sort algorithm consist of?

 N



 N+1



 N-1



 N/2



### No, the answer is incorrect. Score: 0

### Accepted Answers:

*N-1*

**1 point**

Consider an array of length 5, arr[5] = {9,7,4,2,1}. What are the steps of insertions done while running insertion sort on the array?

 7 9 4 2 1           4 7 9 2 1           2 4 7 9 1           1 2 4 7 9



 9 7 4 1 2           9 7 1 2 4           9 1 2 4 7           1 2 4 7 9



 7 4 2 1 9           4 2 1 9 7           2 1 9 7 4           1 9 7 4 2



 7 9 4 2 1           2 4 7 9 1           4 7 9 2 1           1 2 4 7 9



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*7 9 4 2 1           4 7 9 2 1           2 4 7 9 1           1 2 4 7 9*

**1 point**

A sort which iteratively passes through a list to exchange the first element with any element less than it and then repeats with a new first element is called

 insertion sort



 selection sort



 bubble sort



 heap sort



### Yes, the answer is correct. Score: 1

### Accepted Answers:

*selection sort*

**1 point**

Which sorting algorithm gives best performance when array elements are already sorted?

 quick



 heap



 merge



 insertion



### Yes, the answer is correct. Score: 1

### Accepted Answers: *insertion*

# Batch 3: Week 15 Assessment

**1 point**

If the index value of the array A starts from 1, and A[4][4] ={4,8,2,3,1,7,8,5,6,10,11,13,12,14,16,17} , What will be the value of A[3][4]?

 10

 13

 14

 17

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*13*

**1 point**

If the array, arr is a two dimensional array of 15 rows and 10 columns and array index starts from 0, then arr[10] logically points to,

 ninth row

 ninth column

 tenth row

 tenth column

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*ninth row*

**1 point**

What will be the resulting array after 1st swapping during array reversal process if the array is a={6,7,8,9} ?

 {9,7,8,6}

 {9,8,7,6}

 {6,8,7,9}

 {6,7,8,9}

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*{9,7,8,6}*

**1 point**

Following algorithm determines  
  
1. Start  
2. If pos > 0 and pos <=n, then proceed to step 3, else go to step 9  
3. i ← pos-1  
4. Until i < n -1 , repeat Steps 5 and Step 6  
5. a[i] ← a[i+1]  
6. i ← i +1  
7. n ← n - 1  
8. Display array elements  
9. Stop

 Inserting an element into an array

 Deleting an element into an array

 Updating an element into an array

 Reversing an element of the array

### No, the answer is incorrect. Score: 0

### Accepted Answers:

*Deleting an element into an array*

**1 point**

The concepts of text processing can be used for

 Reversing a string

 Copying a string

 Comparing two strings

 Converting a string from lower case to upper case

### Partially Correct. Score: 0.5

### Accepted Answers:

*Reversing a string*

*Copying a string*

*Comparing two strings*

*Converting a string from lower case to upper case*

**1 point**

The application of character to number conversion is

 Security

 Games

 Tape processing

 Business applications

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*Tape processing*

*Business applications*

**1 point**

The standard code for character to number conversion is

 ASCII

 EIA

 NIC

 HEX

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*ASCII*

**1 point**

In a computer, which one of the following is not used to store one unit or computer word?

 8

 16

 24

 32

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*24*

**1 point**

 Which method is used to find the length of a string?

 strlen()

 stringlen()

 length()

 strsize()

### Yes, the answer is correct. Score: 1

### Accepted Answers:

*strlen()*

**1 point**

Which one of the following is used for string manipulation?

 strcmp()

 strlen()

 strre()

 strret()

### Partially Correct. Score: 0.5

### Accepted Answers:

*strcmp()*

*strlen()*