MSC COMPUTER SCIENCE
(FINAL)

1. What is output of below code?

```
#include<stdio.h>
int main()
{
char name[]="Cppbuz";
int len;
int size;
len = strlen(name);
size = sizeof(name);
printf("%d,%d",len,size);
return 0;
}
```

(A) 6,6
(B) 6,7
(C) 7,7
(D) 0,0

2. What will be printed by the given code ?

```
#include <stdio.h>
int main() {
    int z = 1;
    while (z <= 5) {
        if (z == 3) {
            z++;
        }
        printf("%d ", z);
        z++;
    }
    return 0;
}
```

(A) 1 2 3
(B) 1 2 3 4 5
(C) 1 2 4 5
(D) Compilation Error

3. What is the output of the below program?

```
#include<stdio.h>
int main()
{
for(; ;)
for(; ;)
    printf("CUSAT");

return 0;
}
```

(A) Compilation Error
(B) Runtime Error
(C) CUSAT is printed one time
(D) CUSAT is printed infinite times

4. Which of the following is true about constructor functions in C++?

(A) Constructors are used to initialize objects of a class
(B) Constructors can return values
(C) A constructor is automatically called when an object is deleted
(D) A constructor can be called multiple times for the same object

5. In C++, the virtual keyword is used for

(A) Declaring an abstract class
(B) Declaring a static method
(C) Enabling method overriding in derived classes
(D) Declaring a constant

6. What is the output of the following C++ program?

```
#include <iostream>
using namespace std;
int main() {
    int a = 7, b = 2;
    cout << a / b << endl;
    cout << a % b << endl;
    return 0;
}
```

(A) 3 1
(B) 3 0
(C) 3 2
(D) Compilation error

7. Find the output of the following program.

```
main(){
 char ch[] = "CUSAT Entrance";
 int l = strlen(ch);
 cout << l << endl;
}
```

(A) 13
(B) 14
(C) 12
(D) Error

8. Find the output of the following program.

```
main(){
  int a = 10, b, c;
  b  = a++;
  c = a;
  cout << a << " " <<b <<" "<< c << endl;
}
```

(A) 10 11 11
(B) 11 11 11
(C) 11 10 11
(D) 10 10 10

9. What is the output of the following code?

```
#include<iostream>
void func(int x) {
    cout << x <<"";
}

int main() {
    func(5);
    return 0;
}
```

(A) 5
(B) 5 0
(C) func
(D) Error

10. In the relational model, a tuple represents a……

(A) column in a table
(B) relationship between tables
(C) row in a table
(D) unique identifier for a record

11. The situation when in a linked list START=NULL is

(A) Underflow
(B) Overflow
(C) Houseful
(D) Saturated

12. Convert the infix to postfix for A-(B+C)*(D/E)

(A) ABC+DE/*-
(B) ABC-DE/*-
(C) ABC-DE*/-
(D) None of the above

13. The data structure required to evaluate a postfix expression is

(A) queue
(B) stack
(C) array
(D) linked-list

14. What is the height of a tree?

(A) The number of nodes in the tree
(B) The number of edges on the longest path from the root to a leaf
(C) The number of children of the root node
(D) The number of levels in the tree

15. Semaphore is a synchronization tool which can be used to deal with the

(A) Critical section
(B) Race condition
(C) Cooperating process
(D) Deadlock

16. The Banker's algorithm is used to…….

(A) rectify deadlock
(B) detect deadlock
(C) prevent deadlock
(D) solve the deadlock

17. Consider the following processes with their burst times

Process	Burst Time
P1	4
P2	3
P3	5

What will be the average waiting time for these processes using FCFS scheduling?

(A) 4
(B) 3

(C) 5
(D) 2

18. Which of the following scheduling algorithms gives minimum average waiting time?

(A) FCFS
(B) SJF
(C) Round – robin
(D) Priority

19. What is Non-pre-emption?

(A) In Non-Pre- emption, the process is forcefully removed from the CPU
(B) In Non-Pre-emption, the processes are not removed until they complete the execution
(C) In Non-Pre- emption, the process is revoked
(D) None of the above

20. What does the 'this' pointer refer to in C++?

(A) It refers to the base class of the current object
(B) It refers to the current object
(C) It is used to call member functions
(D) It refers to the static variables of the class

21. What is the default access specifier for the members of a class in C++?

(A) public
(B) protected
(C) private
(D) None of the above

22. Which of the following SQL command is used for removing (or deleting) a relation form the database?

(A) Drop
(B) Delete
(C) Rollback
(D) Remove

23. Which SQL statement is used to add a new row in the "employees" table?

(A) INSERT INTO employees VALUES (...);
(B) ADD INTO employees VALUES (...);
(C) INSERT VALUES INTO employees (...);
(D) CREATE INTO employees VALUES (...);

24. In dynamic programming, the main idea is to

(A) break the problem into smaller subproblems and solve each one recursively
(B) solve each subproblem only once and store the solution for future use
(C) use a greedy approach to make decisions
(D) solve problems by brute force

25. Which of the following traversal techniques visits the nodes in this order: root, left, right?

(A) Preorder traversal
(B) Inorder traversal
(C) Postorder traversal
(D) Level-order traversal

26. The time complexity of quicksort is

(A) $O(n)$
(B) $O(\log n)$
(C) $O(n^2)$
(D) $O(n \log n)$

27. Which of the following is true about linear search?

(A) It is faster than binary search for large data sets
(B) It works only on sorted data
(C) It works on both sorted and unsorted data
(D) It requires additional memory for implementation

28. Thrashing occurs in a system when

(A) the processes on the system access pages and not memory frequently
(B) a page fault pops up
(C) the processes on the system are in running state
(D) the processes on the system are in the waiting state

29. Time quantum is defined in

(A) shortest job scheduling algorithm
(B) priority scheduling algorithm
(C) round robin scheduling algorithm
(D) multilevel queue scheduling algorithm

30. What is a thread in the context of operating systems?

(A) A single sequence of executable instructions
(B) A type of hardware
(C) A memory management technique
(D) A user command

31. Which keyword is used to prevent any changes in the variable within a C program?

(A) immutable
(B) mutable
(C) const
(D) volatile

32. What will happen if the following C code is executed?

```
#include <stdio.h>
int main()
{
    int main = 3;
   printf("%d", main);
   return 0;
 }
```

(A) It will cause a compile-time error
(B) It will cause a run-time error
(C) It will run without any error and prints 3
(D) It will experience infinite looping

33. What will be the output of the following C code?

```
#include  <stdio.h>
    int main()
    {
       signed char chr;
       chr = 128;
       printf("%d\n", chr);
       return 0;
    }
```

(A) 128
(B) –128
(C) Depends on the compiler
(D) Compiler-time error

34. What will be the output of the following C code?

```
#include <stdio.h>
 void main()
{
     int x = 4, y, z;
     y = --x;
     z = x--;
     printf("%d%d%d", x, y, z);
}
```

(A) 3 2 3
(B) 2 2 3
(C) 3 2 2
(D) 2 3 3

35. What will be the output of the following C code?

```
#include <stdio.h>
  int main()
  {
    do
      printf("In while loop ");
    while (0);
      printf("After loop\n");

  }
```

(A) In while loop
(B) In while loop After loop
(C) After loop
(D) Infinite loop

36. How many times while loop condition is tested in the following C code snippets,
if i is initialized to 0 in both the cases?

```
    while (i < n)
         i++;
         _____
do
         i++;
    while (i <= n);
```

(A) n, n
(B) n, n + 1
(C) n + 1, n
(D) n + 1, n + 1

37. What will be the output of the following C code?

```
#include<stdio.h>
main()
{
    int n;
    n=f1(4);
    printf("%d",n);
}
f1(int x)
{
    int b;
    if(x==1)
        return 1;
    else
        b=x*f1(x-1);
        return b;
}
```

(A) 24
(B) 4
(C) 12
(D) 10

38. Local variables are stored in an area called

(A) Heap
(B) Permanent storage area
(C) Free memory
(D) Stack

39. Choose the statement which is incorrect with respect to dynamic memory allocation.

(A) Memory is allocated in a less structured area of memory, known as heap
(B) Used for unpredictable memory requirements
(C) Execution of the program is faster than that of static memory allocation
(D) Allocated memory can be changed during the run time of the program based on the requirement of the program

40. What is the size of myArray in the code shown below? (Assume that 1 character occupies 1 byte)

```
typedef char x[10];
x myArray[5];
```

(A) 5 bytes
(B) 10 bytes
(C) 40 bytes
(D) 50 bytes

41. What will be the output of the following C code?

```
#include<stdio.h>
int main()
{
    int n=10;
    int f(int n);
    printf("%d",f(n));
}
int f(int n)
{
    if(n>0)
        return(n+f(n-2));
}
```

(A) 10
(B) 80
(C) 30
(D) Error

42. What will be the output of the following C++ code?

```
#include <iostream>
    #include <string>
    #include <algorithm>
    using namespace std;
    int main()
    {
        string s = "spaces in text";
        s.erase(remove(s.begin(), s.end(), ' '),
s.end() ) ;
        cout << s << endl;
    }
```

(A) spacesintext
(B) spaces in text
(C) spaces
(D) spaces in

43. Which is more effective while calling the C++ functions?

(A) call by object
(B) call by pointer
(C) call by value
(D) call by reference

44. The C++ code which causes abnormal termination/behaviour of a program should be written under …… block.

(A) catch
(B) throw
(C) try
(D) finally

45. What will be the output of the following C++ code?

```
#include <iostream>
using namespace std;
void square (int *x, int *y)
{
     *x = (*x) * --(*y);
}
int main ( )
{
     int number = 30;
     square(&number, &number);
     cout << number;
     return 0;

}
```

(A) 30
(B) Error
(C) Segmentation fault
(D) 870

46. Which is the correct statement about operator overloading?

(A) Only arithmetic operators can be overloaded
(B) Only non-arithmetic operators can be overloaded
(C) Precedence of operators are changed after overloading
(D) Associativity and precedence of operators does not change

47. Which operator among the following can be overloading using only member function?

(A) Assignment operator
(B) Addition operator
(C) Subtraction operator
(D) Multiplication and division operator

48. If public members are to be restricted from getting inherited from the subclass of the class containing that function, which alternative is best?

(A) Make the function private
(B) Use private inheritance
(C) Use public inheritance
(D) Use protected inheritance

49. How can Encapsulation be achieved?

(A) Using Access Specifiers
(B) Using only private members
(C) Using inheritance
(D) Using Abstraction

50. Which type of inheritance leads to diamond problem?

(A) Single level
(B) Multi-level
(C) Multiple
(D) Hierarchical

51. Global destructors execute in ……. order after main function is terminated.

(A) Sequential
(B) Random
(C) Reverse
(D) Depending on priority

52. If virtual function of base class is redefined in derived class then

(A) It must be declared virtual in derived class also
(B) It may or may not be declared virtual in derived class
(C) It cannot be declared virtual in derived class
(D) It must be declared normally in derived class

53. A major goal of the database system is to minimize the number of block transfers between the disk and memory. Which of the following helps in achieving this goal?

(A) Secondary storage
(B) Storage

(C) Catalog
(D) Buffer

54. For each attribute of a relation, there is a set of permitted values, called the …… of that attribute.

(A) Domain
(B) Relation
(C) Set
(D) Schema

55. The most commonly used operation in relational algebra for projecting a set of tuple from a relation is

(A) Join
(B) Projection
(C) Select
(D) Union

56. Relation *dept year(dept name, total inst 2022, total inst 2023, total inst 2024)*. Here the only functional dependencies are from dept name to the other attributes. This relation is in

(A) Fourth NF
(B) BCNF
(C) Third NF
(D) Second NF

57. Which forms has a relation that possesses data about an individual entity?

(A) 2NF
(B) 3NF
(C) 4NF
(D) 5NF

58. Multi valued dependencies are also called as

(A) Equality generating dependencies
(B) Tuple generating dependencies
(C) Multi-purpose dependencies

(D) None of the above

59. ……. refers to the ability of the system to recover committed transaction updates if either the system or the storage media fails.

(A) Isolation
(B) Atomicity
(C) Consistency
(D) Durability

60. Problems occur if we don't implement a proper locking strategy

(A) Dirty reads
(B) Phantom reads
(C) Lost updates
(D) Unrepeatable reads

61. A hash table can store a maximum of 10 records, currently there are records in location 1, 3,4,7,8,9,10. The probability of a new record going into location 2, with hash functions resolving collisions by linear probing is

(A) 0.1
(B) 0.6
(C) 0.2
(D) 0.5

62. Instead of locking index leaf nodes in a two-phase manner, some index concurrency-control schemes use …… on individual key values, allowing other key values to be inserted or deleted from the same leaf.

(A) B+ tree locking
(B) Link level locking
(C) Key-value locking
(D) Next value locking

63. In a B+-tree index ……. for each value, we would normally maintain a list of all records with that value for the indexed attribute.

(A) Leaf
(B) Node
(C) Root
(D) Link

64. What data structure would you mostly likely see in non recursive implementation of a recursive algorithm?

(A) Stack
(B) Linked List
(C) Tree
(D) Queue

65. Which of the following concepts make extensive use of arrays?

(A) Binary trees
(B) Scheduling of processes
(C) Caching
(D) Spatial locality

66. The postfix form of the expression (A+ B)*(C*D- E)*F / G is

(A) AB+ CD*E – FG /**
(B) AB + CD* E – F **G /
(C) AB + CD* E – *F *G /
(D) AB + CDE * – * F *G /

67. What is the time complexity of an infix to postfix conversion algorithm?

(A) O(N log N)
(B) O(N)
(C) $O(N^2)$
(D) O(M log N)

68. Which data structure is used in Breadth First Traversal of a graph?

(A) Stack
(B) Queue
(C) Array
(D) Tree

69. In linked list implementation of a queue, front and rear pointers are tracked. Which of the following pointers will change during an insertion into EMPTY queue?

(A) Only front pointer
(B) Only rear pointer
(C) Both front and rear pointer
(D) No pointer will be changed

70. Which of the following tree data structures is not a balanced binary tree?

(A) Splay tree
(B) B-tree
(C) AVL tree
(D) Red-black tree

71. If several elements are competing for the same bucket in the hash table, what is it called?

(A) Diffusion
(B) Replication
(C) Collision
(D) Duplication

72. Given an array arr = {5,6,77,88,99} and key = 88; How many iterations are done until the element is found?

(A) 1
(B) 3
(C) 4
(D) 2

73. In a full binary tree if there are L leaves, then total number of nodes N are

(A) N = 2*L
(B) N = L + 1
(C) N = L – 1
(D) N = 2*L – 1

74. A graph with all vertices having equal degree is known as a

(A) Multi Graph
(B) Regular Graph
(C) Simple Graph
(D) Complete Graph

75. Which of the following problem occurs due to linear probing?

(A) Primary collision
(B) Secondary collision
(C) Separate chaining
(D) Extendible hashing

76. Which among the following is the best technique to handle collision?

(A) Quadratic probing
(B) Linear probing
(C) Double hashing
(D) Separate chaining

77. What will be the number of passes to sort the elements using insertion sort?
14, 12, 16, 6, 3, 10

(A) 6
(B) 5
(C) 7
(D) 1

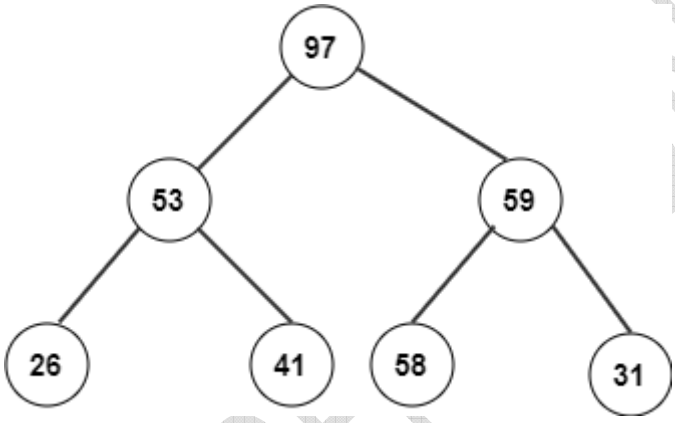
78. The given array is arr = {1,2,4,3}. Bubble sort is used to sort the array elements. How many iterations will be done to sort the array with improvised version?

(A) 4
(B) 1
(C) 2
(D) 0

79. Which of the following methods is the most effective for picking the pivot element?

(A) first element
(B) last element
(C) median-of-three partitioning
(D) random element

80. Consider the following heap after build heap phase. What will be its corresponding array?



(A) 26,53,41,97,58,59,31
(B) 26,31,41,53,58,59,97
(C) 26,41,53,97,31,58,59
(D) 97,53,59,26,41,58,31

81. An algorithm supposed to calculate the sum of numbers from 1 to n returns a higher value than expected. What is the most likely mistake?

(A) Starting the loop from 0
(B) Not initializing the sum variable
(C) Adding n twice
(D) All of the above

82. A recursive algorithm expected to have a time complexity of O(log n) is running slower. The likely issue is

(A) not halving the input on each recursive call
(B) incorrect termination condition
(C) stack overflow
(D) stack underflow

83. How is a binary search algorithm adapted for a rotated sorted array?

(A) Adjust search based on middle element comparison
(B) Double the search range every step
(C) Search only one half of the array
(D) Re-sort the array before searching

84. In which scenario would a greedy algorithm be preferred over dynamic programming?

(A) When an optimal solution needs to be guaranteed for all cases
(B) When subproblems overlap and dependent
(C) When subprograms are independent and local optimum is acceptable
(D) When the problem size is very small

85. What technique is used in dynamic programming to transform a recursive solution into an iterative one?

(A) Memorization
(B) Tabulation
(C) Backtracking
(D) Divide and conquer

86. What is the primary purpose of Dijkstra's algorithm in graph theory?

(A) To find the shortest path between all pairs of nodes
(B) To detect cycles within the graph
(C) To find the shortest path from a single source to all other nodes in the graph
(D) To create a minimum spanning tree

87. Why are topological sorts important in graph algorithms?

(A) They are used to detect cycles in undirected graphs
(B) They provide a way to schedule tasks with dependencies
(C) They find the shortest path in weighted graphs
(D) They compute the maximum flow in networks

88. In the context of algorithm design, what is backtracking?

(A) A technique for finding the shortest path in a graph
(B) A way to conserve memory by deleting unnecessary data
(C) A recursive method for solving combinatorial problems by trying to build a solution incrementally
(D) A data compression method

89. What is the main idea behind the approximation algorithms?

(A) To provide the exact solution to NP-hard problems
(B) To provide solutions that are close to the best possible answer for NP-hard problems
(C) To reduce the time complexity of algorithms to polynomial time
(D) To convert NP-hard problems into P problems

90. In optimizing a recursive algorithm with memoization, a programmer finds that the program runs out of memory. What is a potential solution?

(A) Increasing the available memory
(B) Converting the recursion to iterative form to use less memory
(C) Reducing the problem size
(D) Using a more efficient memoization strategy

91. What is the recurrence relation for the linear search recursive algorithm?

(A) $T(n - 2) + c$
(B) $2T(n - 1) + c$
(C) $T(n - 1) + c$
(D) $T(n + 1) + c$

92. Which of the following is the fastest algorithm in string matching field?

(A) Boyer-Moore's algorithm
(B) String matching algorithm
(C) Quick search algorithm
(D) Linear search algorithm

93. Recursive solution of tower of hanoi problem is an example of which of the following algorithm?

(A) Dynamic programming
(B) Backtracking
(C) Greedy algorithm
(D) Divide and conquer

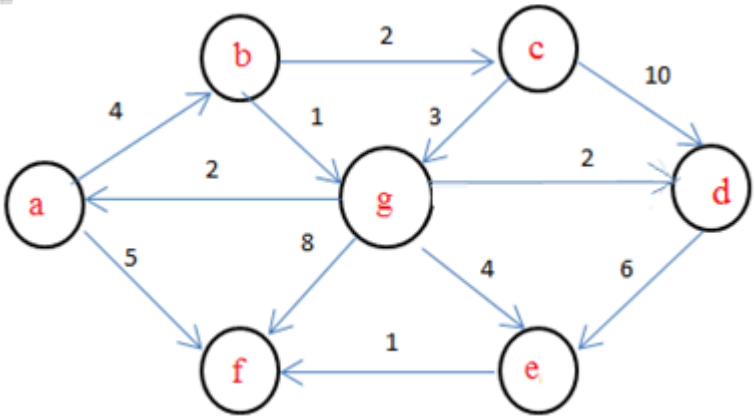
94. How many solutions are there for 8 queens on 8*8 board?

(A) 12
(B) 91
(C) 92
(D) 93

95. Which of the following problems should be solved using dynamic programming?

(A) Mergesort
(B) Binary search
(C) Longest common subsequence
(D) Quicksort

96. Consider the following graph.



If b is the source vertex, what is the minimum cost to reach f vertex?

(A) 8
(B) 9
(C) 4
(D) 6

97. Floyd Warshall's Algorithm can be applied on

(A) undirected and unweighted graphs
(B) undirected graphs
(C) directed graphs
(D) acyclic graphs

98. For an effective operating system, when to check for deadlock?

(A) Every time a resource request is made at fixed time intervals
(B) At fixed time intervals
(C) Every time a resource request is made
(D) None of the above

99. On systems where there are multiple operating system, the decision to load a particular one is done by

(A) process control block
(B) file control block
(C) boot loader
(D) bootstrap

100. With …….only one process can execute at a time; meanwhile all other process are waiting for the processor. With ……. more than one process can be running simultaneously each on a different processor.

(A) Multiprocessing, Multiprogramming
(B) Multiprogramming, Uniprocessing
(C) Multiprogramming, Multiprocessing
(D) Uniprogramming, Multiprocessing

101. If X is the brother of the son of Y's son, how is X related to Y?

(A) Grandson
(B) Son
(C) Cousin
(D) Cannot be determined

102. Neha Kavi moved a distance of 75 metres towards the north. She then turned to her left and walked for 25 metres, turned left again and walked 80 metres. Finally, she turned to the right at an angle of 45º. In which direction was she moving finally?

(A) North-East
(B) North-West
(C) South
(D) South-West

103. At a conference, 12 members shook hands with each other before and after the meeting. How many total number of handshakes occurred?

(A) 100
(B) 122
(C) 132
(D) 145

104. In a certain code FIRE is coded as DGPC. What will be the last letter of the coded word for SHOT?

(A) Q
(B) R
(C) S
(D) P

105. A train 120 meters long is running with a speed of 60 km/hr. In what time will it pass a boy who is running at 6 km/hr in the direction opposite to that in which the train is going?

(A) 6.54 sec
(B) 44.32 sec
(C) 55 sec
(D) 30.2 sec

106. Find the speed of the train, if a train 142 m long passes a pole in 6 seconds.

(A) 77.2 km/hr
(B) 79.6 km/hr
(C) 84.9 km/hr
(D) 79.2 km/hr

107. Sum of present ages of A, B and C is 92 years. If 4 years ago, the ratio of their ages were 1:2:3 respectively, find A's present age.

(A) 8.5 year
(B) 14.8 years
(C) 17.3 years
(D) 20.3 years

108. 2 years ago A's age was 6 times of B's age. 6 years after the ratio between the ages of A and B becomes 10 : 3. What is A's present age?

(A) 44
(B) 38
(C) 42
(D) 34

109. 3 years back average age of A and B was 32. Today average age of A,B and C is 30. What is the age of C?

(A) 5
(B) 10
(C) 15
(D) 20

110. What is the value of c , If 8 is 4% of a, and 4 is 8% of b. c equals $\frac{b}{a}$?

(A) 12
(B) $\frac{1}{4}$
(C) 0.155
(D) None of the above

111. Dilip is the brother of Rahul. Sujata is the sister of Atul. Rahul is the son of Sujata. How is Dilip related to Sujata ?

(A) Son
(B) Brother
(C) Father
(D) Nephew

112. A man is 24 years, older than his son. In two years, his age will be twice the age of his son. The present age of his son is ?

(A) 14 years
(B) 20 years
(C) 22 years
(D) 18 years

113. M scores more run than N but less than P. Q scores more than N but less than M. Who is the lowest scorer?

(A) M
(B) N
(C) P
(D) Q

114. Harish sits on the right of Satish. Satish sits between Manish and Girish. Who sits farthest to the right?

(A) Satish
(B) Girish
(C) Harish
(D) Manish

115. Six persons A, B, C, D, E and Fare sitting in a circle. B is between F and C; A is between E and D; F is to the left of D. Who is between A and F?

(A) B
(B) C
(C) D
(D) A

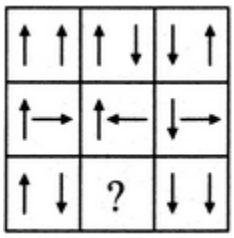
116. Two students appeared at an examination. One of them secured 9 marks more than the other and his marks was 56% of the sum of their marks. The marks obtained by them are

(A) 39, 30
(B) 41, 32
(C) 42, 33
(D) 43, 34

117. A fruit seller had some apples. He sells 40% apples and still has 420 apples. Originally, he had:

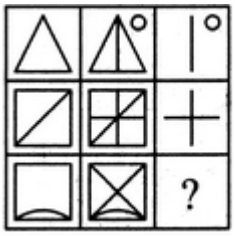
(A) 588 apples
(B) 600 apples
(C) 672 apples
(D) 700 apples

118. Select a suitable figure from the four alternatives that would complete the figure matrix.



(A) 
(B) 
(C) 
(D) 

119. Select a suitable figure from the four alternatives that would complete the figure matrix.



(A) 

(B) 

(C) 

(D) 

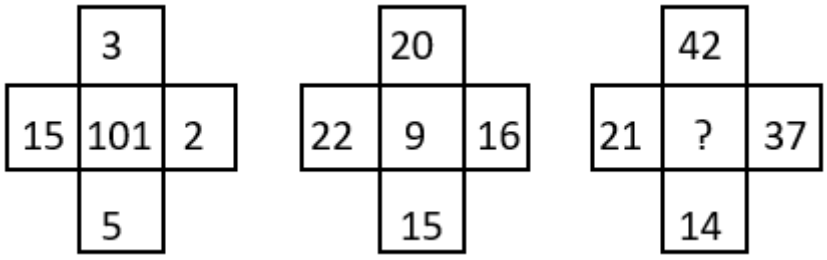
120. In an election between two candidates, one got 55% of the total valid votes, 20% of the votes were invalid. If the total number of votes was 7500, the number of valid votes that the other candidate got, was

(A) 2500
(B) 2700
(C) 2900
(D) 3100

121. A bag contains 50 P, 25 P and 10 P coins in the ratio 5: 9: 4, amounting to Rs. 206. Find the number of coins of each type respectively.

(A) 360, 160, 200
(B) 160, 360, 200
(C) 200, 360,160
(D) 200,160,300

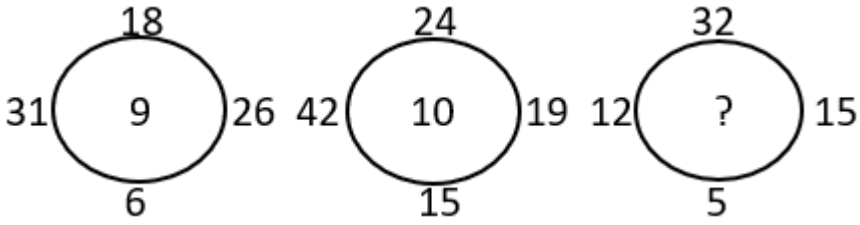
122. Find the correct alternative which will replace the question mark



(A) 25

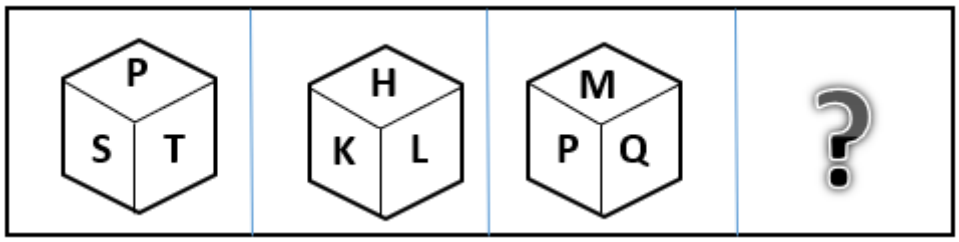
(B) 4
(C) 59
(D) 7

123. Find the correct alternative which will replace the question mark



(A) 6
(B) 7
(C) 8
(D) 4

124. Find the correct alternative which will replace the question mark



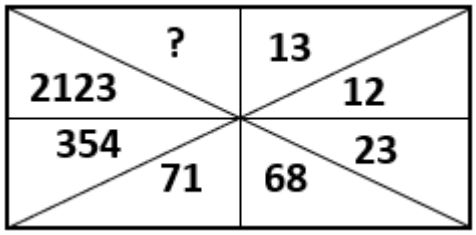
(A) 

(B) 

(C) 

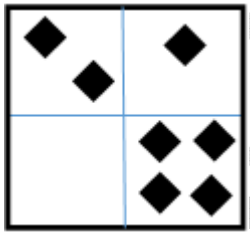
(D) 

125. Find the correct alternative which will replace the question mark



(A) 25235
(B) 32043
(C) 28423
(D) 14860

126. Identify the figure which completes the pattern.



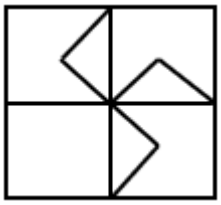
(A) 

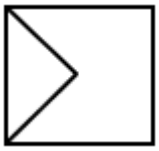
(B) 

(C) 

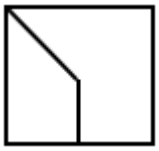
(D) 

127. Identify the figure which completes the pattern.



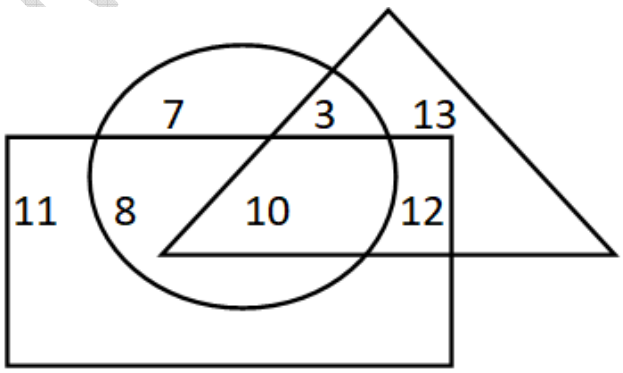
(A) 

(B) 

(C) 

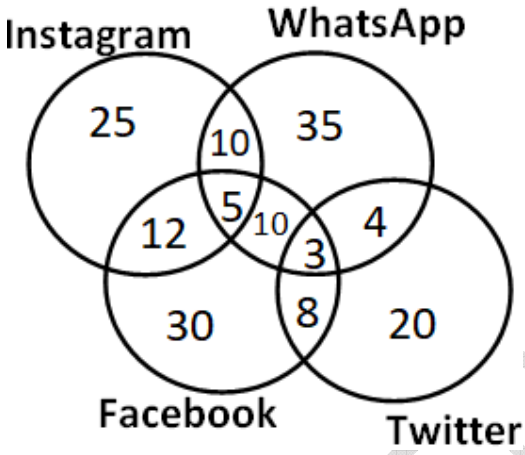
(D) 

128. If triangle represents politicians, rectangle represents actors and circle represents Lawyers. Then which number represents actors that are politicians but not lawyers?



(A) 10
(B) 12
(C) 8
(D) 3

129. The following diagram shows the number of people who uses WhatsApp, Facebook, Instagram and Twitter. If the total number of people is 100, then what is the number of people who uses Twitter and Facebook but not Instagram or WhatsApp?



(A) 18
(B) 11
(C) 10
(D) 8

130. What is the next number in the series?

21, 16, 22, 15, 23, 14, …..?

(A) 24
(B) 13
(C) 21
(D) 19

131. Complete the series

14, 46, 68, 86, ?, 41.

(A) 28
(B) 64
(C) 78
(D) 62

132. How many odd numbers are there in the following series of numbers, each of which is immediately preceded by an even number, but not immediately followed by an odd number?

7 2 8 9 1 3 4 5 7 5 8 9 6 9 1 8 2 4 9 2 6

(A) 1
(B) 2
(C) 3
(D) 4

133. In a row of 26 girls, when Sakshi shifted four places towards the left, she become 10^{th} from the left end. What was her earlier position from the right end of the row?

(A) 10^{th}
(B) 11^{th}
(C) 12^{th}
(D) 13^{th}

134. Deepa's younger brother Bobby is older than Htika. Shweta is younger than Nilesh but elder than Deepa. If Nilesh is younger than Shyam then who is the eldest?

(A) Deepa
(B) Bobby
(C) Nilesh
(D) Shyam

135. Every prime number of the form $3x + 1$ can be represented in the form $6y + 1$ where, x and y are integers, then what should be the values of x?

(A) Odd number
(B) Perfect square
(C) Natural number
(D) Even number

136. Find the number of factors of $\frac{6!}{2! \times 4!}$

(A) 4
(B) 8
(C) 2
(D) 12

137. Two equilateral triangle have sides of lengths 38 and 114 respectively. A greatest length of tape that can measure both of them exactly is formed. How many such equal parts can be measured?

(A) 20
(B) 24
(C) 27
(D) 18

138. Find the value of p, if $pq = 24$ and $p^2 + q^2 = 52$.

(A) 8 or 3
(B) 12 or 2
(C) 6 or 4
(D) 1 or 24

139. Find the value of $\sqrt{12+\sqrt{12+\sqrt{12+...}}}$

(A) 5
(B) 4.5
(C) 3.9
(D) 4

140. The ages of 5 people are in a ratio 1:3:5:7:11. If the difference between the total of their age and the average of their ages is 108, find the age of the Youngest of them.

(A) 5
(B) 10
(C) 15
(D) 12

141. P can do a piece of work in 22 days. Q is twice as efficient as P. Find the time required by Q to complete 4 times the work done by P.

(A) 12 days
(B) 24 days
(C) 44 days
(D) 96 days

142. Two dice are thrown simultaneously. What is the probability of getting a number divisible by 2 on the first dice and a number divisible by 3 on the second dice simultaneously?

(A) $\frac{1}{6}$

(B) $\frac{1}{3}$

(C) $\frac{1}{4}$

(D) $\frac{1}{2}$

143. Find the missing term in the given letter analogy.

ADLK : CFNM :: GRSP : ?

(A) WXYZ
(B) GHJK
(C) ABCD
(D) ITUR

144. In a certain code "CLOUD" is written as "ENQWF". How "CRACK" is written in that code?

(A) SPUPSR
(B) ETCEM
(C) ESAPTO
(D) NJELVP

145. The probability that tomorrow will be a sunny day is 0.68, then what is the probability that tomorrow will not be a sunny day?

(A) 0.32
(B) 0.64

(C) 0.44
(D) 0.56

Direction: Read the following information carefully and answer the questions given below:

- Six persons *A*, *B*, *C*, *D*, *E*, and *F* are sitting in two rows, three in each.
- *E* is not at the end of any row.
- *D* is second to the left of *F*.
- *C*, the neighbour of *E*, is sitting diagonally opposite to *D*.
- B is the neighbour of *F*.

146. Which of the following is sitting diagonally opposite each other?

(A) *F* and *C*
(B) *A* and *C*
(C) *D* and *E*
(D) *A* and *F*

147. Who is facing *B*?

(A) *D*
(B) *C*
(C) *A*
(D) *E*

148. Which of the following are in the same row?

(A) *A* and *E*
(B) *B* and *C*
(C) *D* and *A*
(D) *F* and *C*

149. Which of the following is in one of the two rows?

(A) *ABC*
(B) *AEF*
(C) *DBF*
(D) *FBC*

150. After interchanging seat with *E*, who will be the neighbors of *D* in the new position?

(A) *C* and *A*
(B) Only *B*
(C) Only *A*
(D) *F* and *A*

ANSWER KEY									
Subject Name:		**MSC COMPUTER SCIENCE**							
SI No.	**Key**	**SI No.**	**Key**	**SI No.**	**Key**	**SI No.**	**Key**	**SI No.**	**Key**
1	B	31	C	61	C	91	C	121	C
2	C	32	C	62	C	92	A	122	B
3	D	33	B	63	A	93	D	123	C
4	A	34	D	64	A	94	C	124	B
5	C	35	B	65	D	95	C	125	D
6	A	36	D	66	C	96	D	126	C
7	B	37	A	67	B	97	C	127	B
8	C	38	D	68	B	98	C	128	B
9	A	39	C	69	C	99	C	129	D
10	C	40	D	70	B	100	D	130	A
11	A	41	C	71	C	101	A	131	B
12	A	42	A	72	D	102	D	132	B
13	B	43	D	73	D	103	C	133	D
14	B	44	C	74	B	104	B	134	D
15	A	45	D	75	A	105	A	135	D
16	C	46	D	76	D	106	C	136	A
17	A	47	A	77	B	107	C	137	B
18	B	48	B	78	C	108	A	138	C
19	B	49	A	79	C	109	D	139	D
20	B	50	C	80	D	110	B	140	A
21	C	51	C	81	C	111	A	141	C
22	A	52	B	82	A	112	C	142	A
23	A	53	D	83	A	113	B	143	D
24	B	54	A	84	C	114	B	144	B
25	A	55	B	85	B	115	C	145	A
26	D	56	B	86	C	116	C	146	D
27	C	57	C	87	B	117	D	147	D
28	A	58	B	88	C	118	A	148	A
29	C	59	D	89	B	119	D	149	C
30	A	60	D	90	B	120	B	150	A