MSC COMPUTER SCIENCE
(FINAL)

1. `#define` is a

    (A) Pre-processor compiler directive
    (B) Control statement
    (C) Compiler
    (D) User-defined function

2. Enumeration is an example for ……………. data type

    (A) Primary
    (B) User-defined
    (C) Derived
    (D) Console

3. The symbolic constants are defined in

    (A) Declaration Section
    (B) Linker Section
    (C) Definition Section
    (D) Global Declaration Section

4. The keyword that is used to transfer control from a function back to the calling function is

    (A) switch
    (B) goto
    (C) go back
    (D) return

5. Which of the following reduces the size of a structure?

    (A) union
    (B) bit fields
    (C) malloc
    (D) calloc

6. What is the output of the following C code?

```
#include <stdio.h>
struct student
{
char *c;
};
void main()
{
struct student s[2];
printf("%d", sizeof(s));
}
```

(A) 2
(B) 4
(C) 16
(D) 8

7. What is the output of the C code given below?

```
#include<stdio.h>
int main()
{
int  x=5;
if(5)
{
if(sizeof('\0'))
printf("inside if block");
else
printf("inside else block");
}
return 0;
}
```

(A) inside if block
(B) inside else block
(C) None
(D) Compilation Error

8. Which of the following correctly shows the hierarchy of arithmetic operations in C?

(A) / + * −
(B) − / +
(C) + − / *
(D) / * + −

9.   What is the full form of STL?

     (A) Standard Template Library
     (B) System Template Library
     (C) Standard Topics Library
     (D) None of the above

10. What will be the output of the following statements?

```
#include<stdio.h>
void  main(){
intz[5] = {4,8,12,16};
printf("%d %d %d %d", z[4],z[3],z[2],z[1]);
}
```

     (A) 0 0 0 0
     (B) 4 8 12 16
     (C) 0 16 12 8
     (D) 16 12 8 4

11. What will be the output of the following statements?

```
#include<stdio.h>
void main(){
char str[25] ="Decode";
printf("%s\n",  str+3);
}
```

     (A) Decode
     (B) code
     (C) ode
     (D) Error

12. In an assignment statement $x = y$; which of the following is true?

     (A) The value of variable 'y' is assigned to variable 'x' but if variable 'y' changes later, it will not change the value of variable 'x'
     (B) The value of variable 'x' is assigned to variable 'y' but if variable 'x' changes later, it will not change the value of variable 'y'
     (C) The value of variable 'y' is assigned to variable 'x' but if variable 'y' changes later, it will change the value of variable 'x'
     (D) The value of variable 'x' is assigned to variable 'y' but if variable 'x' changes later, it will change the value of variable 'y'

13. Which of the following is responsible for conversion of C program to machine language?

   (A) Interpreter
   (B) Compiler
   (C) Operating System
   (D) Editor

14. Which of the following is not a basic data type in 'C' language?

   (A) double
   (B) float
   (C) char
   (D) array

15. What is the output of the following 'C' program?

```
include<stdio.h>
void main(){
int i=2;
printf("%d %d", ++i, i--);
}
```

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

16. What will be the output of the following C code (considering size of char is 1 and pointer is 4)?

```
#include <stdio.h>
void main()  {
 char *a[2] = {"hello", "hi"};
 printf("%d", sizeof(a));
 }
```

   (A) 9
   (B) 4
   (C) 8
   (D) 13

17. What will be the output of the following 'C' program?

```c
#include<stdio.h>
int X=40;
int main(){
int X=20;
printf("%d\n", X);
return 0;
}
```

(A) 20
(B) 40
(C) Error
(D) No output

18. What is the output of the following 'C' program?

```c
#include<stdio.h>
int main(){
int a[5] = {2, 3},i=1;
printf("%d, %d, %d\n", a[i--], a[i], a[i++]);
return 0;
}
```

(A) 0,0,3
(B) 2,3,3
(C) 3,2,2
(D) Garbage values

19. What is the output of the following 'C' program?

```c
#include<stdio.h>
int main(){
union x
{
int i;
char ch[2];
};
union x u;
u.ch[0] = 0;
u.ch[1] = 2;
printf("%d, %d, %d\n", u.ch[0], u.ch[1], u.i);
return 0;
}
```

(A) 0, 2, 0
(B) 0, 2, 512
(C) 512, 2, 0
(D) None of the above

20. What will be the output of the following C program?

```
#include <stdio.h>
int main() {
enum result {fail, pass, unknown, known};
enum result s=unknown;
if (pass !=2)
printf("%d", s);
else
printf("%d", known);
return 0;
}
```
(A) 2
(B) 1
(C) unknown
(D) 3

21. In C++, how many access specifiers are there in a class?

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

22. Which one of the following is used to define the member of a class externally?

(A) :
(B) ::
(C) #
(D) *

23. How many types of inheritance are in C++?

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

24. How many types of constructor are there in C++?

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

25. How many types of templates are available in C++?

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

26. If abstract class is inherited by derived class, then

   (A) derived class should provide definition for all the pure virtual functions
   (B) derived class also become abstract if fails to implement pure virtual functions
   (C) objects of derived class can't be created if it fails to implement pure virtual functions
   (D) All of the above

27. When a virtual function is redefined by derived class, it is called as

   (A) Overloading
   (B) Overriding
   (C) Rewriting
   (D) All of the above

28. When overloading unary operators using *friend* function, it requires ……………. argument/s

   (A) zero
   (B) one
   (C) two
   (D) three

29. If inner catch handler is not able to handle the exception then

   (A) compiler will look for outer try handler
   (B) program terminates abnormally
   (C) compiler will check for appropriate catch handler of outer try block
   (D) None of the above

30. What is similar to interface in C++?

   (A) Methods
   (B) Instance of class
   (C) Pure abstract class
   (D) None of the above

31. Which function is used to read a single character from the console in C++?

(A) cin.get(ch)
(B) getline(ch)
(C) read(ch)
(D) scanf(ch)

32. How many types of polymorphisms are supported by C++?

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

33. Which is the correct(C) and incorrect (I) form of default constructor for following class?

```
#include <iostream>
 using namespace std;
 class sample{
 private:
 int x,y;
  };
```

(i) public: void sample(){}
(ii) public: void sample(){ x=0; y=0;}

(A) (i)-C, (ii)-C
(B) (i)-C, (ii)-I
(C) (i)-I, (ii)-C
(D) (i)-I, (ii)-I

34. Which type of Access Specifier class data member **number** is?

```
class test_1{        //a simple class
int number;
};
```

(A) private
(B) public
(C) protected
(D) default

35. Which of the following type of class allows only one object of it to be created?

    (A) Virtual class
    (B) Abstract class
    (C) Singleton class
    (D) Friend class

36. What will happen in the following C++ code snippet?

```
int a = 100, b = 200, *p = &a, *q = &b;
p = q;
```

    (A) b is assigned to a
    (B) p now points to b
    (C) a is assigned to b
    (D) q now points to a

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

```
#include <iostream>
using namespace std;
int recur(int num) {
return (num)? num%10 + recur(num/10):0;
}
int main(){
cout<<recur(561);
}
```

    (A) 10
    (B) 11
    (C) 12
    (D) 13

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

```
#include<iostream>
using namespace std;
int main()  {
int a = 5, b = 10, c = 15;
intarr[3] = {&a, &b, &c};
cout<< *arr[*arr[1] - 8];
return 0;
}
```

    (A) 15
    (B) 18
    (C) garbage value
    (D) compile time error

39. Which of the following is not a type of constructor?

   (A) Copy constructor
   (B) Friend constructor
   (C) Default constructor
   (D) Parameterized constructor

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

```
#include <iostream>
using namespace std;
struct sec{
int a;
char b;
};
int main()    {
struct sec s ={25,50};
struct sec *ps = (struct sec *)&s;
cout<<ps->a <<"  "<<ps->b;
return 0;
 }
```

   (A) 25 2
   (B) 25 3
   (C) 25 4
   (D) 26 2

41. A term 'push' or 'pop' is related to

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

42. The time complexity of quick sort is

   (A) $O(n)$

   (B) $O(n^2)$

   (C) $O(n \log n)$

   (D) $O(\log n)$

43. The postorder traversal of binary tree is DEBFCA. Find out the preorder traversal.

   (A) ABFCDE
   (B) ADBFEC
   (C) ABDECF
   (D) ABDCEF

44. The correct matching for the following pairs is

   (a) All pairs shortest path   (1) Greedy
   (b) Quick sort   (2) Depth-first search
   (c) Minimum weight spanning tree   (3) Dynamic programming
   (d) Connected Components   (4) Divide and conquer

   (A) (a)-(2), (b)-(4), (c)-(1), (d)-(3)
   (B) (a)-(3), (b)-(4), (c)-(1), (d)-(2)
   (C) (a)-(3), (b)-(4), (c)-(2), (d)-(1)
   (D) (a)-(4), (b)-(1), (c)-(2), (d)-(3)

45. For an undirected graph with 'n' vertices and 'e' edges, the sum of the degree of each vertex is equal to

   (A) $2n$

   (B) $\dfrac{2n-1}{2}$

   (C) $2e$

   (D) $\dfrac{e^2}{2}$

46. How many nodes does a complete binary tree of level 5 have?

   (A) 20
   (B) 63
   (C) 30
   (D) 73

47. A tree, for which at every node the height of its left subtree and right subtree differ at most by one is a/an

   (A) Binary search tree
   (B) AVL tree
   (C) Complete binary tree
   (D) Threaded binary tree

48.   A binary search tree is generated by inserting the following integers in order 50, 15, 62, 5, 20, 58, 91, 3, 8, 37, 60, 24. The number of nodes in the left subtree and right subtree of the root respectively is

(A)   (4, 7)
(B)   (7, 4)
(C)   (8, 3)
(D)   (3, 8)

49.   Any node in the path from the root in any tree is called

(A)   Ancestor node
(B)   Successor node
(C)   Internal node
(D)   None of the above

50.   Which of the following are applications of stack?

(i)   Finding factorial
(ii)   Tower of Hanoi
(iii) Infix to postfix conversion

(A)   Only (i) and (ii)
(B)   Only (ii) and (iii)
(C)   Only (i) and (iii)
(D)   All (i), (ii) and (iii)

51.   What does the following function do for a given Linked List with first node as head?

```
void listPrint(struct node* head){
if(head == NULL)
return;
listPrint(head→next);
printf("%d", head→data);
 }
```

(A)   Prints all nodes of linked lists
(B)   Prints all nodes of linked list in reverse order
(C)   Prints alternate nodes of linked list
(D)   Prints alternate nodes in reverse order

52. In a priority queue, insertion or deletion takes place at

   (A) front, rear end
   (B) only at rear end
   (C) only at front end
   (D) any position

53. Which of the following algorithms scans the list by swapping the entries whenever pair of adjacent keys is out of desired order?

   (A) Insertion Sort
   (B) Quick Sort
   (C) Shell Sort
   (D) Bubble Sort

54. A linear list in which each node has pointer to point to the predecessor and successor is called as

   (A) Doubly Linked List
   (B) Singly Linked List
   (C) Circular Linked List
   (D) Linear Linked List

55. A hash table of length 10 uses open addressing with hash function h(k)=k mod 10, and linear probing. The contents of the table after inserting 6 values into an empty hash table is as follows

| 0	1	2	3	4	5	6	7	8	9
		22	33	54	32	56	63		

Which one of the following choices gives a possible order in which the key values could have been inserted in the table?

   (A) 56, 22, 54, 32, 33, 63
   (B) 54, 22, 33, 32, 63, 56
   (C) 22, 56, 63, 33, 54, 32
   (D) 56, 54, 22, 33, 32, 63

56. Which data structure allows deleting and inserting data elements at rear?

    (A) Queues
    (B) Stacks
    (C) Dequeues
    (D) Binary search tree

57. What is the postfix representation of following expression?

    (12 – a) * (b + 9) / (d * 4)

    (A) 4 b * d 9 + a 12 – * /
    (B) / 12 a – b 9 + d 4 *
    (C) 12 – a * b + 9 / d * 4
    (D) 12 a – b 9 + * d 4 * /

58. The optimal time $T(n)$ of the Tower of Hanoi problem with n discs is

    (A) $2T(n - 2) + 2$
    (B) $2T(n - 1) + n$
    (C) $2T\left(\dfrac{n}{2}\right) + 1$
    (D) $2T(n - 1) + 1$

59. Which of the following technique is used to find all pairs of shortest distances in a graph?

    (A) Dynamic programming
    (B) Backtracking
    (C) Greedy Method
    (D) Divide and Conquer

60. In a Max heap, the largest key is at

    (A) the root
    (B) a leaf
    (C) a node
    (D) Cannot be determined

61. Which of the following methods can be used to solve n-Queen's problem?

    (A) Greedy algorithm
    (B) Divide and Conquer
    (C) Iterative improvement
    (D) Backtracking

62. In recursion, the condition for which the function will stop calling itself is

   (A) Best case
   (B) Worst case
   (C) Base case
   (D) There is no such condition

63. Which of the following is asymptotically smaller?

   (A) $\log(\log^* n)$

   (B) $\log^*(\log n)$

   (C) $\log(n!)$

   (D) $\log^*(n!)$

64. Which of the following algorithms can be used to solve the Hamiltonian path problem efficiently?

   (A) Dynamic programming
   (B) Divide and Conquer
   (C) Greedy algorithm
   (D) Branch and Bound

65. For the undirected, weighted graph given below, which of the following sequences of edges represents a correct execution of Prim's algorithm to construct a Minimum Spanning Tree?
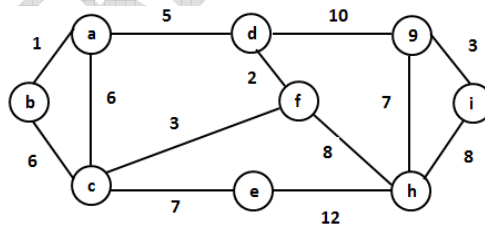
   (A) (a, b), (d, f), (f, c), (g, i), (d, a), (g, h), (c, e), (f, h)
   (B) (c, e), (c, f), (f, d), (d, a), (a, b), (g, h), (h, f), (g, i)
   (C) (d, f), (f, c), (d, a), (a, b), (c, e), (f, h), (g, h), (g, i)
   (D) (h, g), (g, i), (h, f), (f, c), (f, d), (d, a), (a, b), (c, e)

66. Which data structure is very useful when data has to be stored and then retrieved in reverse order?

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

67. A directed graph is ……………… if there is a path from each vertex to every other vertex in the graph

(A) Weakly connected
(B) Strongly connected
(C) Tightly connected
(D) Linearly connected

68. Which matrix has most of the elements (not all) as Zero?

(A) Sparse Matrix
(B) Identity Matrix
(C) Unit Matrix
(D) Zero Matrix

69. What is the time complexity of Kruskal's algorithm?

(A) $O(\log V)$

(B) $O(E \log V)$

(C) $O(E^2)$

(D) $O(V \log E)$

70. Which of the following is INCORRECT?

(A) Algorithms can be represented as pseudo codes
(B) Algorithms can be represented as syntax
(C) Algorithms can be represented as programs
(D) Algorithms can be represented as flowcharts

71. From the following sorting algorithms which algorithm needs the minimum number of swaps?

(A) Bubble sort
(B) Quick sort
(C) Merge sort
(D) Selection sort

72. The number of swapping needed to sort numbers 8, 22, 7, 9, 31, 19, 5, 13 in ascending order using bubble sort is

(A) 11
(B) 12
(C) 13
(D) 14

73. Relational calculus is a

   (A) Procedural language
   (B) Non - Procedural language
   (C) Data definition language
   (D) High - level language

74. DML is provided for

   (A) description of the logical structure of a database
   (B) addition of new structures in the database system
   (C) manipulation and processing of the database
   (D) definition of a physical structure of the database system

75. In an E-R diagram, the attributes are represented by

   (A) rectangle
   (B) square
   (C) ellipse
   (D) triangle

76. Cross Product is a

   (A) Unary Operator
   (B) Binary Operator
   (C) Ternary Operator
   (D) Not an operator

77. In the architecture of the database system, external level is termed as

   (A) Physical level
   (B) Logical level
   (C) Conceptual level
   (D) View level

78. Which of the following makes the transaction permanent in the database?

   (A) View
   (B) Commit
   (C) Rollback
   (D) Flashback

79. A query in the tuple relational calculus is expressed as

    (A) $\{t \mid P() \mid t\}$
    (B) $\{P(t) \mid t\}$
    (C) $\{t \mid P(t)\}$
    (D) All of the above

80. Database catalog or dictionary defining the descriptive information of the data is called as

    (A) filtered data
    (B) metadata
    (C) basic data
    (D) constrained data

81. Entity-Relationship model is widely used in

    (A) Database design
    (B) Database processing
    (C) Database implementation
    (D) Database direction

82. Data Integrity control

    (A) is used to set upper and lower limits on numeric data
    (B) requires the use of passwords to prohibit unauthorized access to the file
    (C) has the data dictionary to keep the data and time of last access, last back-up and most recent modification for all files
    (D) None of the above

83. Which of the following is not a characteristic of a relational database model?

    (A) Tables
    (B) Treelike Structure
    (C) Complex logical relationships
    (D) Records

84. Which two files are used during operation of the DBMS?

    (A) Data Dictionary and Transaction Log
    (B) Query Languages and Utilities
    (C) Data Manipulation Language and Query Language
    (D) Data Dictionary and Query Language

85. In a relational schema, each tuple is divided into fields called

   (A) Relations
   (B) Domains
   (C) Queries
   (D) None of the above

86. A Relational database which is in 3NF may still have undesirable data redundancy because of

   (i) transitive functional dependencies
   (ii) non-trivial functional dependencies involving prime attributes on the right side
   (iii) non-trivial functional dependencies involving prime attributes on the left side
   (iv) non-trivial functional dependencies involving only prime attributes

   Which of the above statements are true ?

   (A) (i) and (ii)
   (B) (i) and (iii)
   (C) (i) and (iv)
   (D) (ii) and (iv)

87. Multiprocessor systems are also called as

   (A) Parallel Systems
   (B) Tightly Coupled System
   (C) Loosely Coupled System
   (D) Both (A) and (B)

88. Which of the following algorithm tends to minimize the process flow time?

   (A) First Come First Served
   (B) Shortest Job First
   (C) Earliest Deadline First
   (D) Longest Job First

89. Match the following.

    (a)   calloc( )   (i)   Frees previously allocated space
    (b)   free( )   (ii)   Modifies previously allocated space
    (c)   malloc( )   (iii)   Allocates space for array
    (d)   realloc( )   (iv)   Allocates requested size of space

(A) (a) – (iii), (b) – (i), (c) – (iv), (d) – (ii)
(B) (a) – (iii), (b) – (ii), (c) – (ii), (d) – (iv)
(C) (a) – (iii), (b) – (iv), (c) – (ii), (d) – (i)
(D) (a) – (iv), (b) – (ii), (c) – (iii), (d) – (i)

90. In Unix, which system call creates a new process?

(A) fork
(B) create
(C) new
(D) None of the above

91. Multithreading on a multiprocessor machine

(A) decreases concurrency
(B) increases concurrency
(C) doesn't affect the concurrency
(D) None of the above

92. The interval from the time of submission of a process to the time of completion is termed as

(A) waiting time
(B) response time
(C) turnaround time
(D) throughput time

93. ……………. is the concept in which a process is copied into main memory from the secondary memory according to the requirement.

(A) Paging
(B) Segmentation
(C) Demand paging
(D) Swapping

94. The maximum number of processes that can be in Ready State with n CPUs is

(A) n
(B) n^2
(C) $2n$
(D) Independent of n

95. A process can be terminated due to

(A) Normal exit
(B) Fatal error
(C) Killed by another process
(D) All of the above

96. Which of the following requires a device driver?

(A) Register
(B) Cache
(C) Main memory
(D) Disk

97. Identify the **incorrect statement** with respect to the Swap Space

(A) Swap space is used when the amount of physical memory is full
(B) Inactive pages are moved into the swap space
(C) Swap space is a replacement for RAM
(D) Swap space resides in the disk

98. Which of the following scheduling algorithms is non-preemptive?

(A) Round Robin
(B) First-In First-Out
(C) Multilevel Queue Scheduling
(D) Multilevel Queue Scheduling with Feedback

99. Increasing the RAM of a computer typically improves performance because

(A) Fewer page faults occur
(B) Virtual memory increases
(C) Larger RAMs are faster
(D) Fewer segmentation faults occur

100. What is the name of the system which deals with the running of the actual computer and not with the programming problems?

(A) Operating system
(B) Systems program
(C) Object program
(D) Source program

101. Which number comes next in the following series?

7, 10, 8, 11, 9, 12, …….

(A) 7
(B) 12
(C) 10
(D) 13

102. What value will replace the question mark in the following equation?

$$4\frac{1}{2} + 3\frac{1}{6} + ? + 2\frac{1}{3} = 13\frac{2}{5}$$

(A) $3\frac{2}{5}$

(B) $3\frac{4}{8}$

(C) $3\frac{4}{5}$

(D) $3\frac{2}{8}$

103. An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in $1\frac{2}{3}$ hours, it must travel at a speed of

(A) 300 kmph
(B) 360 kmph
(C) 600 kmph
(D) 720 kmph

104. In one hour, a boat goes 11 km along the stream and 5 km against the stream. The speed of the boat in still water (in km/hr) is

(A) 3
(B) 5
(C) 8
(D) 9

105. 'A' can do a work in 15 days and 'B' in 20 days. If they work on it together for 4 days, then the fraction of the work that is left is

(A) $\dfrac{1}{4}$

(B) $\dfrac{1}{10}$

(C) $\dfrac{7}{15}$

(D) $\dfrac{8}{15}$

106. The length of a room is 5.5 m and width is 3.75 m. Find the cost of paving the floor by slabs at the rate of ₹800 per sq. metre.

(A) ₹15,000
(B) ₹15,550
(C) ₹15,600
(D) ₹16,500

107. There are 10 lamps in a hall. Each one of them can be switched on independently. The number of ways in which the hall can be illuminated is

(A) 10^2
(B) 2^{10}
(C) 1023
(D) 10!

108. The difference between two positive numbers is 3 and the sum of their squares is 369. Then the sum of the numbers is

(A) 33
(B) 20
(C) 81
(D) 27

109. If $P^x = Q^y = R^z$ and $\dfrac{Q}{P} = \dfrac{R}{Q}$, then $\dfrac{2z}{(x+z)} = ?$

   (A) $\dfrac{y}{z}$

   (B) $\dfrac{y}{x}$

   (C) $\dfrac{x}{y}$

   (D) $\dfrac{z}{y}$

110. Choose the number pair which differs from others in the group

   (A) (72, 12)
   (B) (48, 24)
   (C) (24, 12)
   (D) (96, 84)

111. The price of oil increases by 25%. By what percentage must a customer reduce the consumption so that the earlier bill on oil does not alter?

   (A) 35%
   (B) 30%
   (C) 25%
   (D) 20%

112. Which one of the following is **NOT** a prime number?

   (A) 31
   (B) 61
   (C) 71
   (D) 91

113. **Direction:** In the question below, there is a sentence of which some parts have been jumbled up. Rearrange these parts which are labeled P,Q,R,S to produce the correct sequence. Choose the proper sequence from the given alternatives.

   It has been established that

   P: Einstein was

   Q: although a great scientist

   R: weak in arithmetic

   S: right from his school days

(A) SRPQ
(B) QPRS
(C) QPSR
(D) RQPS

114. A box contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be drawn from the box, if at least one black ball is to be included in the draw?

(A) 32
(B) 48
(C) 64
(D) 96

115. If the mean of 5 observations x, $x + 2$, $x + 4$, $x + 6$ and $x + 8$ is 11, then the mean of the last three observations is

(A) 11
(B) 13
(C) 15
(D) 17

116. A right triangle with sides 3 cm, 4 cm and 5 cm is rotated about the side of 3 cm to form a cone. The volume of the cone so formed is

(A) $12\pi \text{ cm}^3$
(B) $15\pi \text{ cm}^3$
(C) $16\pi \text{ cm}^3$
(D) $20\pi \text{ cm}^3$

117. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the ends. R is sitting to the left of A. Who is to the right of P?

(A) A
(B) X
(C) S
(D) Z

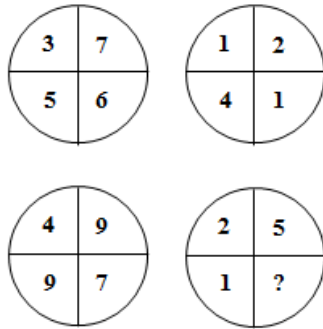118. You go North, turn right, then right again and then go to the left. In which direction are you now?

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

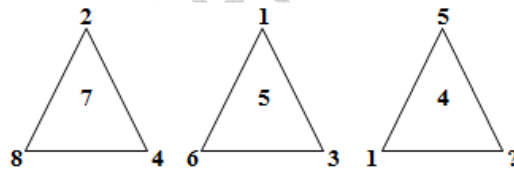119. Five children take part in a tournament. Each one has to play with every other one. How many games must they play?

(A) 8
(B) 10
(C) 24
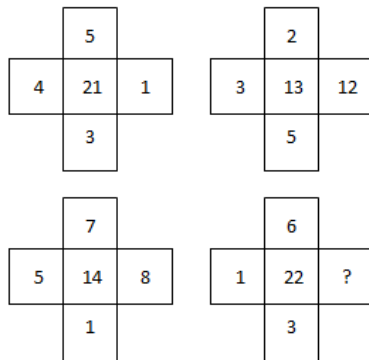(D) 12

120. Which number replaces the question mark?

(A) 1
(B) 8
(C) 5
(D) 6

121. Which number replaces the question mark?

(A) 5
(B) 2
(C) 1
(D) 3

122. Which number replaces the question mark?

	5	
4	21	1
	3	

	2	
3	13	12
	5	

	7	
5	14	8
	1	

	6	
1	22	?
	3	

(A) 3
(B) 4
(C) 6
(D) 14

123. Look carefully at the sequence of symbols to find the pattern

O ♦ △ | ● ◇ ▲ | O ?

Select the correct pattern given in the options from (1) - (4) that has to be replaced in the place of "?"

●△   ♦△   ◆o   ◇▲
(1)   (2)   (3)   (4)

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

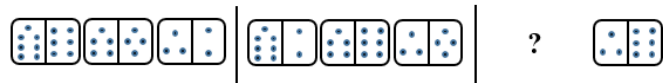124. Look carefully at the sequence of symbols to find the pattern

Select the correct pattern given in the options from (1) - (4) that has to be replaced in the place of "?"

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

125. Look carefully at the sequence of symbols to find the pattern

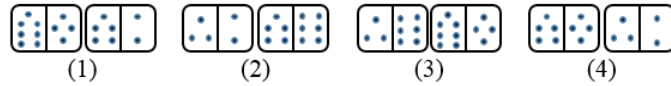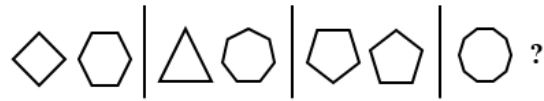Select the correct pattern given in the options from (1) - (4) that has to be replaced in the place of "?"
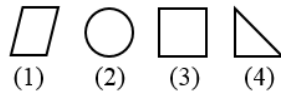

(A) 1
(B) 2
(C) 3
(D) 4

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

Select the correct pattern given in the options from (1) - (4) that has to be replaced in the place of "?"

(1) (2) (3) (4)

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

127. Select the ODD figure out from the following

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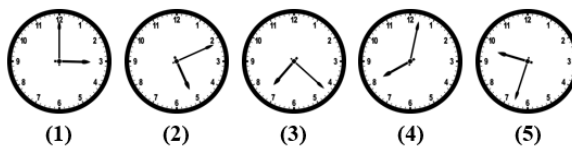
(A) 2
(B) 3
(C) 4
(D) 5

128. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?
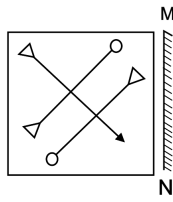
(A)

(B)

(C)

(D)

129. Which figure from the four alternatives given below, is the correct mirror image of the main figure, if a mirror is placed on the line MN?

(A)

(B)

(C)

(D)

130. A man leaves his office and turning East, walks 10 m straight. He then turns towards South and walks 5 m and then turns East and walks 5 m. After turning south, he walks 10 m and then turns West and walks 35 m. How far he is from his office?

   (A) 25 m
   (B) 20 m
   (C) 30 m
   (D) 10 m

131. Find the next term in the series

                   CAT, DEN, PIN, SOW, …………

   (A) SKY
   (B) GYM
   (C) DRY
   (D) FUN

132. Fill in the blanks

                    ELFA, GOJF, ………….., KURP

   (A) JQNK
   (B) IRSQ
   (C) IPNQ
   (D) IRNK

133. If first four letters of the word APPEARANCE are written in reverse order and the next four letters are again written in reverse order and the remaining letters are again written in reverse order, then after this change, which will be the sixth letter from your right?

   (A) N
   (B) A
   (C) P
   (D) R

134. Find the next term of the series

                   DMP, FLN, HKL, JJJ, …………

   (A) LIH
   (B) MII
   (C) III
   (D) MIF

135. Which set of letters, when sequentially placed at the gaps in the given series, completes it?

   _ b c _ c a _ a b a _ c _ c a

   (A) abcbb
   (B) bbbcc
   (C) baaba
   (D) abbcc

136. Find the missing number in the following series

   46080, 3840, 384, 48, **?**, 2, 1

   (A) 24
   (B) 12
   (C) 8
   (D) 4

137. Identify the wrong number in the following series

   5, 11, 23, 47, 96, 191, 383

   (A) 96
   (B) 5
   (C) 11
   (D) 191

138. Examine this series: 2, 9, 45, 247.5, 1485
   If another series as given below is written with same rule what number will come in place of **(X)** ?

   3 , (W) , (X) , (Y) , (Z)

   (A) 75
   (B) 67.5
   (C) 72
   (D) 68

139. Which is the next number in the series?

   8, 28, 116, 584, **?**

   (A) 1752
   (B) 3504
   (C) 3502
   (D) 3508

140. Which is the next number in the series?

120, 99, 80, 63, 48, 35, **?**

(A) 24
(B) 25
(C) 26
(D) 27

141. In the following question, choose the correct code form

If TEN = 39, LIST = 60 then LISTEN = **?**

(A) 79
(B) 39
(C) 69
(D) 99

142. If in a certain code

274 means "sweep the floor"
246 means "mop the floor"
234 means "clean the floor"

Which digit in the code means "clean"?

(A) 2
(B) 3
(C) 4
(D) 6

143. If CERTAIN is coded as "XVIGZRM", how can MUNDANE be coded?

(A) VMZWMFN
(B) MFMXZMV
(C) NFMWZMV
(D) NFMWZMX

144. ACADEMIC is coded as AACEDIMC. Find the code for ACCURACY under the same rule

(A) CAUCARYC
(B) ACCRUCAY
(C) ACRUACCY
(D) None of the above

145. If PROSE is coded as PPOQE, how is LIGHT coded under the same rule?

    (A) LIGFT
    (B) LGGHT
    (C) LLGFE
    (D) LGGFT

146. **Direction:** Arrange the sentences (P, Q, R and S) in the correct order. The first sentence is given as

    Venice is a strange and beautiful city in the north of Italy

    P   There are about four hundred old stone bridges joining the island of Venice
    Q   In this city there are no motor cars, no horses, no buses
    R   This is because Venice has no streets
    S   It is not an island but a hundred and seventeen islands

    (A) PQRS
    (B) PRQS
    (C) SQRP
    (D) SPQR

147. **Direction:** Arrange the sentences (P, Q, R and S) in the correct order. The first sentence is given as

    A man can be physically confined within stone walls

    P   But his mind and spirit will still be free
    Q   Thus, even if his freedom of action is restricted
    R   His hopes and aspiration still remain with him
    S   Hence, he will be free spiritually if not physically

    (A) PQRS
    (B) SRQP
    (C) QPRS
    (D) QPSR

148. Complete the analogy

    Newspaper: Press :: Cloth : **?**

    (A) Tailor
    (B) Textile
    (C) Fibre
    (D) Mill

149. What will be the simple interest earned on an amount of ₹16,800 in 9 months at the rate of $6\frac{1}{4}$ % p.a ?

(A) ₹787.50
(B) ₹812.50
(C) ₹860
(D) ₹887.50

150. If A : B = 5 : 7 and B : C = 6 : 11 then A : B : C

(A) 55 : 77 : 66
(B) 30 : 42 : 77
(C) 35 : 49 : 42
(D) 39 : 27 : 32

FINAL ANSWER KEY

Subject Name: 502 MSC COMPUTER SCIENCE

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