

# Question Paper Preview

## Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

<b>Question Paper Name :</b>	M Sc Computer Science 02nd July 2023 Shift 2
<b>Subject Name :</b>	M.Sc. Computer Science
<b>Creation Date :</b>	2023-07-02 16:31:03
<b>Duration :</b>	90
<b>Total Marks :</b>	100
<b>Display Marks:</b>	No
<b>Calculator :</b>	None
<b>Magnifying Glass Required? :</b>	No
<b>Ruler Required? :</b>	No
<b>Eraser Required? :</b>	No
<b>Scratch Pad Required? :</b>	No
<b>Rough Sketch/Notepad Required? :</b>	No
<b>Protractor Required? :</b>	No
<b>Show Watermark on Console? :</b>	Yes
<b>Highlighter :</b>	No
<b>Auto Save on Console?</b>	Yes
<b>Change Font Color :</b>	No
<b>Change Background Color :</b>	No
<b>Change Theme :</b>	No
<b>Help Button :</b>	No
<b>Show Reports :</b>	No
<b>Show Progress Bar :</b>	No

## M.Sc. Computer Science

<b>Group Number :</b>	1
<b>Group Id :</b>	18152058
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	90
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	100
<b>Is this Group for Examiner? :</b>	No
<b>Examiner permission :</b>	Cant View
<b>Show Progress Bar? :</b>	No

### PART A

<b>Section Id :</b>	18152090
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	100
<b>Number of Questions to be attempted :</b>	100
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	18152099
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	null

**Question Number : 1 Question Id : 1815206174 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

What is the output of the below program?

```
#include <stdio.h>
int main()
{
int i = 0;
switch ( i )
{
    case '0': printf("Hello");
              break;
    case '1': printf( "India");
              break;
    default: printf( " HelloIndia");
}
return 0;
}
```

**Options :**

- 1.  Hello
- 2.  India
- 3.  HelloIndia

4. ✘ Compile-time-error

Question Number : 2 Question Id : 1815206175 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

What is printed by the following C program segment?

```
int a=40, b=25;  
printf("%d", a=b);
```

Options :

1. ✔ 25

2. ✘ 40

3. ✘ 0

4. ✘ Error message

Question Number : 3 Question Id : 1815206176 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

What would be the output of the following piece of code

```
main()
{
int i=3;
switch(i)
{
default: printf("Zero");
case 1: printf("One");
break;
case 2:printf("Two");
break;
case 3: printf("Three");
break;
}
}
```

Options :

- 1. ✘ Zero
- 2. ✘ One
- 3. ✘ Two
- 4. ✔ Three

**Question Number : 4 Question Id : 1815206177 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Output of the following program fragment is

```
x=5;  
y=x++;  
printf("%d %d",x,y);
```

**Options :**

1. ✘ 5,6
2. ✘ 5,5
3. ✔ 6,5
4. ✘ 6,6

**Question Number : 5 Question Id : 1815206178 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Select the correct output of execution :

```
main()
{

float me = 1.1;
double you = 1.1;
if(me==you)
printf("This is same");
else
printf("Not equal");
}
```



Options :

1. ✘ This is same
2. ✔ Not equal
3. ✘ This is same Not equal
4. ✘ Error

**Question Number : 6 Question Id : 1815206179 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

```
void main() {  
  
int i;  
char a[]="\0";  
if(printf("%s\n",a))  
printf("Ok here \n");  
else  
printf("Forget it\n");  
}
```

Options :

1.  NULL
2.  Ok here
3.  Forget it
4.  Error

**Question Number : 7 Question Id : 1815206180 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

feof( ) function checks for

Options :

1. ✘ File opening error
2. ✘ Data error
3. ✔ End of file
4. ✘ File closing error

**Question Number : 8 Question Id : 1815206181 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

If the two strings are identical, then strcmp() function returns

**Options :**

1. ✘ -1
2. ✘ 1
3. ✔ 0

Yes

4. ✘

**Question Number : 9 Question Id : 1815206182 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

What will be the output of execution of the following piece of code ?

```
main()
{
static int var = 5;
printf("%d ",var --);
if(var)
main();
}
```

Options :

1. ✘ Error

2. ✘ Infinite loop

3. ✔ 5 4 3 2 1

4. ✘ 1 2 3 4 5

Question Number : 10 Question Id : 1815206183 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

```
void f ( int* p, int m) {  
    m = m + 5;  
    *p = *p + m;  
    return;  
}  
void main( )  
{  
    int i=5, j=10;  
    f ( &i, j );  
    printf ("%d", i + j );  
}
```

Options :

1. ✘ 3
2. ✘ 15
3. ✘ 12
4. ✔ 30

Question Number : 11 Question Id : 1815206184 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

What will be the output of the following C program?

```
void count(int n)
{
    static int d =1;
    printf ("%d ",n);
    printf ("%d ",d);
    d++;
    if(n>1) count(n-1);
    printf("%d ",d);
}
void main( )
{
    count(3);
}
```

Options :

1. ✓ 3 1 2 2 1 3 4 4 4

2. ✘ 3 1 2 1 1 1 2 2 2

3. ✘ 3 1 2 2 1 3 4

3 1 2 1 1 1 2

4. ✘

**Question Number : 12 Question Id : 1815206185 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

What does the following declaration mean?

```
int (*ptr)[10];
```

Options :

1. ✘ ptr is array of pointers to 10 integers

2. ✔ ptr is a pointer to an array of 10 integers

3. ✘ ptr is an array of 10 integers

4. ✘ ptr is an pointer to array

**Question Number : 13 Question Id : 1815206186 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

The value Printed by the Program given below is \_\_\_\_\_

```
#include <stdio.h>
int jumble(int x, int y)
{
x=2*x+y; return x;
}
int main()
{
int x=2, y=5;
y= jumble(y,x);
x= jumble(y,x);
printf("%d \n", x);
return 0;
}
```

Options :

1. ✘ 35
2. ✔ 26
3. ✘ 64
4. ✘ 46

**Question Number : 14 Question Id : 1815206187 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

What does the following segment of code do? `fprintf(fp, "Copying!");`

**Options :**

1. ✓ It writes "Copying!" into the file pointed by fp
2. ✘ It reads "Copying!" from the file and prints on display
3. ✘ It writes as well as reads "Copying!" to and from the file and prints it
4. ✘ It reads "Copying!" onto display

**Question Number : 15 Question Id : 1815206188 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

A function which is used as a formatted output to a file stream is :

**Options :**

1. ✘ printf()

2. ✔ fprintf()

3. ✘ puts()

4. ✘ fputs()

**Question Number : 16 Question Id : 1815206189 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

What is the output of execution the following piece of C++ code

```
#include <iostream>
using namespace std;
int main()
{
    int x = 0, y = 10;
    cout << "x is " << x << " and y is " << y << endl;
    if (x > y);
    cout << "x is greater than y\n";
    return 0;
}
```

**Options :**

1. ✘ X is 10 y is 0 x is greater than y

2. ✘ X is 0 y is 0 x is greater than y

3. ✘ X is 1 y is 0 x is greater than y

4. ✔ X is 0 y is 10 x is greater than y

**Question Number : 17 Question Id : 1815206190 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

What is the result of execution of the following piece of C++ code ?

```
#include <iostream>
using namespace std;
int main()
{
double a = 1.5;
double b = 1.5;
a += 0.000000000000000001; // Add a little to a.
if (a == b)
cout << "Both a and b are the same.\n";
else
cout << "a and b are not the same.\n";
return 0;
}
```

Options :

a and b are not the same

1. ✘

Error in the program

2. ✘

Both a and b are the same

3. ✔

No Output

4. ✘

Question Number : 18 Question Id : 1815206191 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Find out the output of following program

```
a = 2;  
b = 5;  
c = a * b++;  
cout << a << " " << b << " " << c;
```

Options :

1. ✘ 2 10 6

2. ✔ 2 6 10

3. ✘ 6 2 10

4. ✘ 2 10 6

Question Number : 19 Question Id : 1815206192 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Consider the following code

```
#include <iostream>
using namespace std;
void foo(int n, int sum )
{
    int k= 0,j = 0 ;
    if(n == 0) return;
    k = n % 10; j = n/10;
    sum = sum + k ;
    foo( j, sum);
    printf(" %d,", k);
}
```

```
int main()
{
    int a = 2048 , sum = 0;
    foo(a, sum);
    printf("%d\n", sum);
}
```

On execution, what does the program print?

Options :

8, 4, 0, 2, 14

1. ✘

8, 4, 0, 2, 0

2. ✘

2, 0, 4, 8, 14

3. ✘

2, 0, 4, 8, 0

4. ✔

**Question Number : 20 Question Id : 1815206193 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Consider the Two statements given :

Statement 1 : Even though static member variables are declared in a class, they are actually defined outside the class declaration. The lifetime of a class's static member variable is the lifetime of the program.

Statement 2 : A class's static member functions can be called before any instances of the class are created.

**Options :**

only statement 1 is correct

1. ✘

only statement 2 is correct

2. ✘

Neither statement 1 nor statement 2 are correct

3. ✘

Both statement1 and statement2 are correct

4. ✔

**Question Number : 21 Question Id : 1815206194 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**



Consider the following Program, and identify the concept being demonstrated by this code

```
#include <iostream>
Using namespace std;

template < class T>
T sum ( T val1, T val2 )
{
    return val1 + val2 ;
}

template < class T>
T sum ( T val1, T val2, T val3)
{
    return val1 + val2 + val3 ;
}

int main ( )
{
    double num1, num2, num3;
    //Get two values and display their sum
    cout << " Enter two values : " ;
    cin >> num1 >> num2 ;
    cout << " Their sum is " << sum(num1, num2)<< endl;
    // Get three values and display their sum
    cout << " enter their values: " ;
    cin >> num1 >> num2 >> num3 ;
    cout << " Their sum is " << sum( num1, num2, num3) << endl;
    return 0;
}
```

Options :

1. ✘ Exception handling with multiple parameters
2. ✘ Use of basic concept of Templates
3. ✔ Use of Overloaded function Template
4. ✘ Summing of values in C++

**Question Number : 22 Question Id : 1815206195 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

How many bytes of memory is reserved for a function template when it is Defined?

Options :

1. ✘ 2 bytes
2. ✘ 4 bytes

3. ✓ No memory

8 bytes

4. ✘

**Question Number : 23 Question Id : 1815206196 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

How many return values may a function have?

**Options :**

Any number

1. ✘

1

2. ✓

6

3. ✘

8

4. ✘

**Question Number : 24 Question Id : 1815206197 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Consider the following statements:

Statement I : An overloaded function is one with the same name as one or more other functions and with the same parameter list.

Statement II : When a class contains a pure virtual function as a member, that class becomes an abstract base class.

Which of the following is TRUE :

Options :

1. ✘ Statement I and Statement II are correct.
2. ✘ Statement I is correct and statement II is Incorrect.
3. ✔ Statement I is Incorrect and Statement II is correct.
4. ✘ Statement I and Statement II are incorrect.

Question Number : 25 Question Id : 1815206198 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Which of the following statements is False?

Options :

Pure virtual functions are declared with the =0 notation.

1. ✘

Abstract base class can be instantiated.

2. ✔

Pure virtual functions have no body, or definition in the base class.

3. ✘

A pure virtual function must be overridden at some point in a derived class in order for it to become non- abstract.

4. ✘

**Question Number : 26 Question Id : 1815206199 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

If a function is called more than once in a program, the values stored in the function's \_\_\_\_\_ variables do not persists between function calls.

**Options :**

1. ✘ Global

2. ✔ Local

3. ✘ Internal

Outer

4. ✘

**Question Number : 27 Question Id : 1815206200 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is False?

Options :

Protected members of a base class are like Public members, but they may be accessed by derived class.

1. ✔

Member access specification determines how members that are defined within the class are accessed.

2. ✘

Base class access specification determines how inherited members are accessed.

3. ✘

The base class's constructor is called before the derived class's constructor.

4. ✘

**Question Number : 28 Question Id : 1815206201 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Consider the two statements given, and select the appropriate option :

Statement I : An overloaded function is one with the same name as one or more other functions, but with a different parameters list.

Statement II : Redefining a function happens when a derived class has a function with the same name as a base class.

**Options :**

Only Statement I is correct.

1. ✘

Only Statement II is correct

2. ✘

Both statement I and Statement II are correct.

3. ✔

Neither Statement I nor statement II is correct.

4. ✘

**Question Number : 29 Question Id : 1815206202 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

The Compiler will generate an error if you attempt to define an object of an \_\_\_\_\_ class.

Options :

1. ✘ Redefined class
2. ✘ Overridden class
3. ✘ Runtime class
4. ✔ Abstract Base class

Question Number : 30 Question Id : 1815206203 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Given the following statements:

Statement I – Pointers to a base class should not be assigned the address of a derived class object.

Statement II- When you write a class with a destructor, and that class could potentially become a base class, you should always declare the destructor *virtual*.

Options :

Statement I is Correct and Statement II is incorrect.

1. ✘

Statement I is Incorrect and Statement II is Correct.

2. ✔

Statement I and Statement II are Correct

3. ✘

Statement I is Incorrect and Statement II is Also incorrect.

4. ✘

Question Number : 31 Question Id : 1815206204 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Which of the following statements are FALSE?

Options :

A function Template is a generic function that can work with any data type.

1. ✘

Once an Exception has been thrown, the program cannot jump back to the throw point.

2. ✘

For every exception that may be thrown in the try block, it is enough to write code in same catch block.

3. ✔

The Standard Template Library contains many templates for useful algorithms and data structures.

4. ✘

**Question Number : 32 Question Id : 1815206205 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Match the following member functions of the Vector class Template with their Description.

Sl. No.	Member function	Sl.No.	Description
I	Begin( )	a)	Returns an iterator pointing to the vector's last element.
II	Back( )	b)	Causes the vector element pointed to by the iterate <i>iter</i> to be removed.
III	End ( )	c)	Returns an iterator pointing to the vector's first element.
IV	Erase ( )	d)	Returns a reference to the last element in the vector

Options :

1. ✘ I- (a), II- (b), III- (c), IV- (d)
2. ✔ I- (c ), II- (d ), III – ( a), IV- (b)
3. ✘ I – ( c ) , II- (d ), III- (b), IV – (a)
4. ✘ I - ( c ), II – (a), III – (b), IV – (c )

**Question Number : 33 Question Id : 1815206206 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

These are important data structures in the STL. A \_\_\_\_\_ is an object that behaves like a pointer. A \_\_\_\_\_ is a class that stores data and organizes it in some fashion.

The options to fill in the blanks in given order are :

**Options :**

Container, Vector

1. ✘

Vector, iterator

2. ✘

Iterator, Container

3. ✔

Container, Iterator

4. ✘

**Question Number : 34 Question Id : 1815206207 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Stack A has entries a, b, c( with a on top). Stack B is empty. An entry popped out of Stack A can be printed immediately or pushed to Stack B. An entry popped out of Stack B can only be printed. In this agreement, which of the following permutations of a, b, and c is not possible?

Options :

1. ✘ bac

2. ✘ bca

3. ✔ cab

4. ✘ abc

Question Number : 35 Question Id : 1815206208 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

The data structure used for recursion is :

Options :

1. ✔ Stack

2. ✘ Queue

3. ✘ Tree

4. ✘ Heap

**Question Number : 36 Question Id : 1815206209 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

The following sequence of operations is performed on stack push(1), push(2), pop, push(1), push(2), pop, pop, pop, push(2), pop. The sequence of the popped values is :

**Options :**

1. ✘ 2, 2, 1, 2, 2

2. ✔ 2, 2, 1, 1, 2

3. ✘ 2, 1, 2, 2, 1

4. ✘ 2, 1, 2, 2, 2

**Question Number : 37 Question Id : 1815206210 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of the following is essential for efficiently converting an infix expression to its postfix form ?

Options :

1. ✓ An operator stack
2. ✘ An operand stack
3. ✘ An operand and an Operator stack
4. ✘ A parse tree

Question Number : 38 Question Id : 1815206211 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

The prefix form of  $A - B / (C \times D \div E)$  is

Options :

1. ✘  $- 1 \times \$ABCDE$
2. ✘  $- ABCDX\$DE$

3. ✓ -A/BXC\$DE

4. ✘ - A/BCX\$DE

**Question Number : 39 Question Id : 1815206212 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

The initial configuration of a queue is a, b, c, d ( a is at the front end ). To get the configuration d, c, b, a, one needs a minimum of

**Options :**

1. ✘ 2 deletions and 3 additions

2. ✘ 3 deletions and 2 additions

3. ✓ 3 deletions and 3 additions

4. ✘ 3 deletions and 4 additions

**Question Number : 40 Question Id : 1815206213 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

If 'n' elements of a queue are to be reversed using only another temporary queue. The number of add and remove operations required to do so is:

**Options :**

1. ✘  $2 \times n$

2. ✘  $4 \times n$

3. ✘ N

4. ✔ The task cannot be accomplished

**Question Number : 41 Question Id : 1815206214 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

The concatenation of two lists is to be performed in  $O(1)$  time. Which of the following implementations of a list should be used?

**Options :**

Singly linked list

1. ✘

Doubly linked list

2. ✘

Circular doubly linked list

3. ✔

Array implementation of list

4. ✘

**Question Number : 42 Question Id : 1815206215 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

Which of the following operations is performed more efficiently by a doubly linked list than by a linear linked list?

**Options :**

Searching an unsorted list for a given item

1. ✘

Deleting nodes whose location is given

2. ✔

3. ✘ Traversing the list to process each node

4. ✘ Inserting a node after the node with a given location

**Question Number : 43 Question Id : 1815206216 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

A header-linked list , where the last node points to the header node is called –

**Options :**

1. ✘ Grounded header list

2. ✔ Circular header list

3. ✘ General header list

4. ✘ Mid header list

**Question Number : 44 Question Id : 1815206217 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

A binary tree has a height of 5. What id the minimum number of nodes it can have?

**Note: For this question, discrepancy is found in question/answer. Full Marks is being awarded to all candidates.**

**Options :**

1. 31
2. 15
3. 5
4. 1

**Question Number : 45 Question Id : 1815206218 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

A binary tree T has n leaf nodes. The number of nodes of degree 2 in T is :

**Options :**

1. ✘  $\log_2 n$

2. ✔  $n-1$

3. ✘  $n$

4. ✘  $2^n$

**Question Number : 46 Question Id : 1815206219 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

The depth of a complete binary tree with  $n$  nodes is

**Options :**

$\log_2 (n+1) - 1$

1. ✘

$\log_2 n$

2. ✘

$\log_2 (n-1) + 1$

3. ✘

4. ✓  $\log_2 n + 1$

**Question Number : 47 Question Id : 1815206220 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Given two sorted lists of size  $m$  and  $n$ , respectively, the number of comparisons needed in the worst case by the merge sort algorithm will be

**Options :**

1. ✗  $mn$

2. ✗  $\max(m, n)$

3. ✗  $\min(m, n)$

4. ✓  $m + n - 1$

**Question Number : 48 Question Id : 1815206221 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the following is True?

**Options :**

The cost of searching an AVL tree is  $O(\log n)$  but that of a BST is  $O(n)$ .

1. ✓

The cost of searching an AVL tree is  $O(\log n)$  but that of a complete binary tree is  $O(n \log n)$ .

2. ✘

The cost of searching a BST is  $O(\log n)$  but that of an AVL tree is  $O(n)$ .

3. ✘

The cost of searching an AVL tree is  $O(\log n)$  but that of a BST is  $O(n)$ .

4. ✘

**Question Number : 49 Question Id : 1815206222 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the following properties of OBST is NOT true?

**Options :**

The left subtree of a node contains only the nodes with keys less than the node's key.

1. ✘

The right subtree of a node contains only the nodes with keys greater than the node's key.

2. ✘

The left subtree of a node contains only the nodes with keys greater than the node's key.

3. ✔

Both left and right subtrees must also be BST.

4. ✘

**Question Number : 50 Question Id : 1815206223 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

A hash function  $f$  defined as  $f(\text{key}) = \text{key} \text{ MOD } 7$ , with linear probing, is used to insert the keys 37, 38, 72, 48, 98, 11, 56 into a table indexed from 0 to 6. In such a process, 11 will be stored in the location:

**Options :**

1. ✘ 3

2. ✘ 4

3. ✔ 5

**Question Number : 51 Question Id : 1815206224 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is FALSE:

Options :

The index-locking protocol takes advantage of the availability of indices on a relation, by turning instances of the phantom phenomenon into conflicts on locks on index leaf nodes.

1. ✘

The timestamp Ordering Protocol ensures conflict serializability because conflicting operations are processed in timestamp order.

2. ✘

Thomas Write Rule makes use of View Serializability by deleting obsolete write operations from the transactions that issue them.

3. ✘

Basic Multiversion Timestamp Ordering scheme ensures recoverability and cascadeness.

4. ✔

**Question Number : 52 Question Id : 1815206225 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Relationships among relationships can be represented in ER diagrams using

**Options :**

1. ✘ Coloured lines
2. ✘ Bold lines
3. ✔ Aggregation
4. ✘ Association

**Question Number : 53 Question Id : 1815206226 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

The relation book (title, price) contains the titles and prices of different books. Assuming that no two books have the same price, what does the following SQL query list?

```
SELECT title FROM book as B
      WHERE (SELECT count (*) FROM book as T
             WHERE T.price > B.price) < 5
```

Options :

1. ✓ Title of the four most expensive books
2. ✗ Title of the fifth most inexpensive book
3. ✗ Title of the fifth most expensive book
4. ✗ Title of the five most expensive books.

Question Number : 54 Question Id : 1815206227 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Which of the following is TRUE?

Options :

Every relation in 3NF is also in BCNF

1. ✘

A relation R is in 3NF if every non-prime attribute of R is fully functionally dependent on every key of R

2. ✘

Every relation in BCNF is also in 3NF

3. ✔

No relation can be in both BCNF and 3NF

4. ✘

**Question Number : 55 Question Id : 1815206228 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

A lock that specifically reserves access for the transaction that locked the object is known as

**Options :**

a shared lock.

1. ✘

an exclusive lock.

2. ✔

a binary lock.

3. ✘

a two-phase lock.

4. ✘

**Question Number : 56 Question Id : 1815206229 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

An index is clustered, if

**Options :**

It is on a set of fields that form a candidate key.

1. ✘

It is on a set of fields that include the primary key.

2. ✘

The data records of the file are organized in the same order as the data entries of the index.

3. ✔

The data records of the file are organized not in the same order as the data entries of the index.

4. ✘

**Question Number : 57 Question Id : 1815206230 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is TRUE?

**Options :**

When the primary fails, the backup site cannot take over processing to become Primary. Queries must be sent to original Primary.

1. ✘

If the log at the remote backup grows large, recovery will take lesser time.

2. ✘

Physical log record is not idempotent.

3. ✘

To ensure that the updates of a committed transaction are Durable, a transaction must not be declared committed until its log records have reached the backup site.

4. ✔

**Question Number : 58 Question Id : 1815206231 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

Which one of the given Options given below, refers to the degree of relation in relational database systems?

**Options :**

Number of distinct domains of its relation schema

1. ✘

Number of attributes of its relation schema

2. ✔

Number of Entries in the relation

3. ✘

Number of tuples stored in the relation

4. ✘

**Question Number : 59 Question Id : 1815206232 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

Consider following relation student, with primary Key as Roll no.

Student			
Roll No	Name	Gender	Marks
5001	Ramu	M	62
3456	Sita	F	70
8765	Gita	F	80
7689	James	M	82
7466	Tina	F	65

Given one SQL query below executes on above relation instance -

Select \* from Student

Where Gender = ' F ' and marks > 65 ;

Rows of which roll numbers are returned when this query is executed –

Options :

1. ✘ 3456 , 7466

2. ✘ 8765, 7689

3. ✓ 3456, 8765

3456, 8765, 7466

4. ✘

**Question Number : 60 Question Id : 1815206233 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

The relation scheme given below is used to store information about the employees of a Company, where deptID indicates the department to which the employee is assigned. Each employee is assigned to exactly one department.

Emp (empID, name, gender, salary, deptID)

Consider the following SQL query:

```
Select deptID, count (*)
```

```
From emp
```

```
Where gender = 'female' and salary > (select avg ( salary ) from emp)
```

```
group by deptID;
```

The above query gives for each department in the company, the number of female employees whose salary is greater than the average salary of

**Options :**

Employees in the department

1. ✘

2. ✘ Female employees in the department
3. ✘ Female employees in the company
4. ✔ Employees in the company

**Question Number : 61 Question Id : 1815206234 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Consider the following statements S1 and S2 about the relational data model:  
S1 : A relation scheme can have at most one foreign key.  
S2 : A foreign key in a relation scheme R cannot be used to refer to tuples of R.

Which of the following choices is correct ?

**Options :**

- Both S1 and S2 are True
1. ✘
- S1 is false and S2 is True
2. ✘

3. ✓ Both S1 and S2 are False

4. ✘ S1 is true and S2 is False

**Question Number : 62 Question Id : 1815206235 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which join is equivalent to Cartesian Product?

**Options :**

1. ✘ Inner Join

2. ✘ Outer Join

3. ✓ Cross Join

4. ✘ Natural Join

**Question Number : 63 Question Id : 1815206236 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the Following Statements is NOT TRUE in ensuring Integrity Constraints :

Options :

1. ✘ The clause check (*budget* > 0) in the create table command for relation *department* would ensure that the value of budget is nonnegative.
2. ✘ The foreign key must reference a compatible set of attributes, that is, the number of attributes must be the same and the data types of corresponding attributes must be compatible.
3. ✔ Attributes of foreign keys are not allowed to be *null*,
4. ✘ If there is a chain of foreign-key dependencies across multiple relations, a deletion or update at one end of the chain can propagate across the entire chain

Question Number : 64 Question Id : 1815206237 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

In roll-back of transactions, what plays most important role:

Options :

1. ✘ Activity log
2. ✘ Failure records
3. ✔ Checkpoints
4. ✘ Number of tables involved in previous transaction

**Question Number : 65 Question Id : 1815206238 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Consider a business rule such as "an employee supervises other employees". What kind of the relationship exists in the above scenario?

**Options :**

1. ✘ Mandatory relationship
2. ✘ Identifying relationship.
3. ✘ Non Identifying relationship

4. ✓ Recursive Relationship

**Question Number : 66 Question Id : 1815206239 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of the following command is used to delete all information in a table but retain the relation in SQL?

Options :

1. ✘ Delete

2. ✓ Truncate

3. ✘ Rremove

4. ✘ Drop

**Question Number : 67 Question Id : 1815206240 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Let the set of functional dependencies  $F = \{ QR \rightarrow S, R \rightarrow P, S \rightarrow Q \}$  hold on a relation schema  $X = (PQRS)$ .  $X$  is not in BCNF. Suppose  $X$  is decomposed into two schemas  $Y$  and  $Z$ , where  $Y = (PR)$  and  $Z = (QRS)$ . Consider the two statements :

- I. Both  $Y$  and  $Z$  are in BCNF.
- II. Decomposition of  $X$  into  $Y$  and  $Z$  is dependency preserving and lossless.

Which of the following statements is/ are correct?

Options :

II only.

1. ✓

Both I and II

2. ✗

Neither I nor II

3. ✗

I only

4. ✗

Question Number : 68 Question Id : 1815206241 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Which of the following is true concerning triggers

Options :

1. ✘ You do not create them with SQL
2. ✘ They execute against only some applications that access a database
3. ✔ They have an event, condition, and action
4. ✘ They cannot cascade

**Question Number : 69 Question Id : 1815206242 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

The scheme that controls the interaction between executing transactions is called as

Options :

1. ✔ Concurrency control scheme

Multiprogramming scheme

2. ✘

Device Management scheme

3. ✘

Daisy chaining scheme

4. ✘

**Question Number : 70 Question Id : 1815206243 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

A UNION query is which of the following

**Options :**

Combines the output from no more than two queries and must include the same number of columns

1. ✘

Combines the output from no more than two queries and does not include the same number of columns

2. ✘

Combines the output from multiple queries and must include the same number of columns

3. ✓

Combines the output from multiple queries and does not include the same number of columns

4. ✘

**Question Number : 71 Question Id : 1815206244 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

What is the extension of the Bytecode files in JAVA ?

Options :

.jav

1. ✘

.java

2. ✘

.class

3. ✓

.bytecode

4. ✘

**Question Number : 72 Question Id : 1815206245 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of these is the correct declaration of main method?

**Options :**

1. ✓ `public static void main(String args[ ] )`
2. ✘ `private static void main(String args[ ] )`
3. ✘ `static void main( string args[ ])`
4. ✘ `public static void main (String )`

**Question Number : 73 Question Id : 1815206246 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

What is the output when the following program is compiled and run ?

```
Class test{  
Public static void main(String args [ ] ) {  
int i, j, k, l = 0;  
k =il++;  
j = ++k ;  
i = j++ ;  
System.out.println( l );  
} }
```

Options :

- 1. ✘ 0
- 2. ✔ 1
- 3. ✘ 2
- 4. ✘ 3

Question Number : 74 Question Id : 1815206247 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

What is the output when the following program is compiled and run ?

```
public class test {  
    public static void main(String args [] {  
        int i = -1;  
        i = i >> 1;  
        System.out.println( i );  
    }  
}
```

Options :

1. ✘ 63
2. ✔ -1
3. ✘ 0
4. ✘ 1

Question Number : 75 Question Id : 1815206248 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which of the following statements are legal declarations and definitions of a method?

Options :

1. ✓  
Void method( ) { }

2. ✘  
Void method (void) { };

3. ✘  
method( ) { } ;

4. ✘  
method(void) { };

**Question Number : 76 Question Id : 1815206249 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

What is the output when you compile and run the following code?

```
Class Demo
{
Void Demo( )
{
System.out.println(" In Demo");
}
Public static void main(String args [ ] )
{
Demo d = new Demo ( );
}
}
```

**Options :**

1. ✘ Compile time error :Illegal constructor declaration
2. ✘ Runtime error
3. ✘ Compiles and prints " In Demo"
4. ✔ Error: Could not find or load main class Main

**Question Number : 77 Question Id : 1815206250 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which statement is true about a static nested class ?

**Options :**

1. ✘ An instance of the enclosing class is required to instantiate it.
2. ✔ It does not have access to non-static members of the enclosing class

It must have static methods and variables only

3. ✘

It can have only static variables.

4. ✘

**Question Number : 78 Question Id : 1815206251 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

Which of the following statements are True?

**Options :**

If a class has abstract methods, it must be declared as static.

1. ✘

If the abstract methods are not overridden, the subclass need not be declared as abstract.

2. ✘

A final class cannot be subclassed.

3. ✔

All methods in an abstract class must be declared as abstract.

4. ✘

**Question Number : 79 Question Id : 1815206252 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

What is the keyword used for deriving classes?

**Options :**

1. ✘ Implements

2. ✔ Extends

3. ✘ Throws

4. ✘ Inherits

**Question Number : 80 Question Id : 1815206253 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which keyword is used to prevent inheritance?

**Options :**

1. ✔ Final

2. ✘ Super

3. ✘ This

4. ✘ Final

**Question Number : 81 Question Id : 1815206254 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which keyword is used for accessing the features of a package?

**Options :**

1. ✘ Export

2. ✔ Import

3. ✘ Package

4. ✘ Extends

**Question Number : 82 Question Id : 1815206255 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

The two classes of *Throwable* are :

Options :

Error and AssertionError

1. ✘

Error and Exception

2. ✔

Checked and Unchecked Exception

3. ✘

Error and RuntimeException

4. ✘

Question Number : 83 Question Id : 1815206256 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Which interface is used to create a Thread?

Options :

Thread

1. ✘

Runnable

2. ✔

3. ✘ Cloneable

Serializable

4. ✘

**Question Number : 84 Question Id : 1815206257 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which abstract class is the superclass of all classes used for writing bytes?

Options :

Writer

1. ✘

FileWriter

2. ✘

CharWriter

3. ✘

OutputStream

4. ✔

**Question Number : 85 Question Id : 1815206258 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

The default layout of a content pane is:

Options :

FlowLayout

1. ✘

BoxLayout

2. ✘

SpringLayout

3. ✘

BorderLayout

4. ✔

**Question Number : 86 Question Id : 1815206259 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the following is TRUE?

Options :

Hyperlinks are denoted by *link* elements.

1. ✘

The width of all data cells in a table must be the same.

2. ✘

Elements br represents a line break.

3. ✔

You are limited to a maximum of five internal links per page

4. ✘

**Question Number : 87 Question Id : 1815206260 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is FALSE?

**Options :**

The new HTML 5 *input* types are self validating on the client side, eliminating the need to add complicated scripts to your forms to validate user input and reducing the amount of invalid data submitted.

1. ✘

The *range input type* is inherently self- validating when it's rendered by the browser as a slider control, because the user is unable to move the slider outside the bounds of the minimum or maximum value.

2. ✘

HTML5 self validates the *tel input type*.

3. ✔

If the user enters an improperly formatted URL, in a *url input type*, it will not validate.

4. ✘

**Question Number : 88 Question Id : 1815206261 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

In CSS, the three components of the box model are the \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

**Options :**

Overflow, comma, margin

1. ✘

Link, @media, span

2. ✘

Padding, underline, text-style

3. ✘

Padding, border, margin

4. ✔

**Question Number : 89 Question Id : 1815206262 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

With reference to Javascript, which of the following statements is TRUE?

Options :

The default case is required in the switch selection statement.

1. ✘

The break statement is required in the last case of a switch selection statement.

2. ✘

The expression (  $x > y \ \&\& \ a < b$  ) is true if either  $x > y$  is true or  $a < b$  is true.

3. ✘

An expression containing the `||` operator is true if either or both of its operands is true.

4. ✔

Question Number : 90 Question Id : 1815206263 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0

Match the related errors , for the Javascript functions as mentioned on Right side.

Sl. No	Code		Sl.NO	Error
a)	<pre>method g( ) {   document   . writeln ("Inside method g) ; }</pre>		I	Unnecessary semicolon after parameter list.
b)	<pre>function sum( x, y ) {   var result;   result = x + y ; }</pre>		II	Method is not the keyword used for function definition
c)	<pre>function f(a); {   document.writeln(a); }</pre>		III	The function is supposed to return a value, but does not.

The correct combination is :

Options :

(a) – III, (b) – II, (c) –I

1. ✘

(a) – I, (b) – II, (c) – III

2. ✘

(a)-II, (b) – I, (c) – III

3. ✘

(a)- II, (b) – III, (c) – I

4. ✔

**Question Number : 91 Question Id : 1815206264 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

State which of the following is TRUE

**Options :**

An array index should normally be a floating point value.

1. ✘

An individual array element that's passed to a function and modified in it will contain the modified value when the called function completes execution.

2. ✘

An array can store different types of values

3. ✔

Determining if an item is present in an array is called sorting.

4. ✘

**Question Number : 92 Question Id : 1815206265 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is TRUE?

**Options :**

XML is not Case Sensitive

1. ✘

XML schemas are better than DTDs, because DTDs lack a way of indicating what specific type of data, an element can contain, and DTDs are not themselves XML documents.

2. ✔

DTDs are written using an XML vocabulary.

3. ✘

Schema is a technology for locating information in an XML document.

4. ✘

**Question Number : 93 Question Id : 1815206266 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Correct Marks : 1 Wrong Marks : 0

Upon successfully parsing a document, some XML parsers store document data as tree structures in memory. The hierarchical tree structure is called

\_\_\_\_\_.

Options :

XSLT tree

1. ✘

DOM tree

2. ✔

XPath

3. ✘

Namespace

4. ✘

Question Number : 94 Question Id : 1815206267 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Wrong Marks : 0

Given these statements:

Statement I – The XSLT does not analyze every node of the source tree, it selectively navigates the source tree using XPath's *select* and *match* attributes.

Statement II- For XSLT to function, the source tree need not be structured.

Options :

Both statements are correct.

1. ✘

Statement I is correct but Statement- II is incorrect.

2. ✔

Statement II is Correct but Statement – I is incorrect.

3. ✘

Both the statements are incorrect.

4. ✘

**Question Number : 95 Question Id : 1815206268 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is FALSE?

**Options :**

Ajax applications must use XML for server responses.

1. ✔

An Ajax application can be implemented so that it never needs to reload the page on which it runs.

2. ✘

For security purposes, the XMLHttpRequest object does not allow a web application to request resources from servers other than the one that served the web application.

3. ✘

The innerHTML property of a DOM element can be used to obtain or change the HTML that's displayed in a particular element.

4. ✘

**Question Number : 96 Question Id : 1815206269 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Wrong Marks : 0**

In Ajax applications, the \_\_\_\_\_ object manages asynchronous interaction with the server.

**Options :**

Callback

1. ✘

innerHTML

2. ✘

responseXML

3. ✘

4. ✓ XMLHttpRequest

**Question Number : 97 Question Id : 1815206270 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

The basic components that do not come along with Dojo framework are:

Options :

1. ✗ Util

2. ✗ Base

3. ✗ Dojox

4. ✓ JQuery

**Question Number : 98 Question Id : 1815206271 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None  
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0  
Correct Marks : 1 Wrong Marks : 0**

In Javascript , in an event handler, the event object's \_\_\_\_\_ property specifies the element on which the event occurred.

Options :

1. ✘ Return value
2. ✔ Target
3. ✘ Load
4. ✘ Focus

**Question Number : 99 Question Id : 1815206272 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

Which of the following statements is True about Javascript event handling?

Options :

1. ✘ The *load* event fires whenever an element starts loading.

2. ✓ The *click* event fires when the user clicks the mouse on an element.

3. ✘ The *focus* event fires when an element loses focus.

4. ✘ Returning *true* in an event handler or on a element prevents the browser from following the link when the event handler finishes.

**Question Number : 100 Question Id : 1815206273 Question Type : MCQ Option Shuffling : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 1 Wrong Marks : 0**

In Ajax enabled application development, a \_\_\_\_\_ encloses code that might cause an exception and code that should not execute when exception occurs.

**Options :**

1. ✘ innerHTML

2. ✘ Cross-site scripting

*try* block

3. ✓

*callback*

4. ✗