

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_B/ Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 1 OS used: Windows Browser used: Chrome

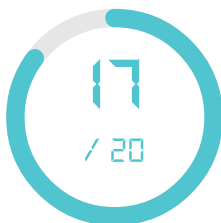
Test Duration: 00:19:27

Test Start Time: May 11, 2022 | 03:44 PM

Test Submit Time: May 11, 2022 | 04:04 PM

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Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 17.61 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 18.01 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 17
Question Wrong: 3
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 17
Question Wrong: 3
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

What are the parts of the literal constants?

☐ integer numerals



floating-point numerals

☐ strings and boolean values

☒ All of the listed options **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Variables and Constants **Blooms Taxonomy:** Understand

☐ Show solution

Question No: 2

Multi Choice Type Question

Report Error

Pick the right option

Statement 1:A definition is also a declaration.

Statement 2:An identifier can be declared just once.

☐ Statement 1 is true, Statement 2 is false.

☒ Statement 2 is true,
Statement 1 is false. **CORRECT**

☐ Both are false.

☐ Both are true.

Recommended Learning Content: [Feedback 1](#) [Feedback 1](#)

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Input and Output Statements

☐ Show solution

Question No: 3

Multi Choice Type Question

Report Error

Which type is best suited to represent the logical values?

☐ integer

☒ boolean CORRECT

☐ character

☐ All of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Data Types **Blooms Taxonomy:** Understand

☐ Show solution

Question No: 4

Multi Choice Type Question

Report Error

The value 132.54 can represented using which data type?

☒ double CORRECT

☐ void

☐ int

☐ bool

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Data Types

☐ Show solution

Question No: 5

Multi Choice Type Question

Report Error

When a language has the capability to produce new data type mean, it can be called as

☐ overloaded

☒ extensible CORRECT

☐ encapsulated☐ reprehensible**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Data Types☐ Show solution**Question No: 6****Multi Choice Type Question****Report Error**

Which of the following statements are false?

☐ bool can have two values and can be used to express logical expressions.☒ bool cannot be used as the type of the result of the function. **CORRECT**☐ bool can be converted into integers implicitly☐ a bool value can be used in arithmetic expressions.**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Functions☐ Show solution**Question No: 7****Multi Choice Type Question****Report Error**

Regarding following statement which of the statements is true?

`const int a = 100;`☐ Declares a variable a with 100 as its initial value

- ☐ Declares a construction a with 100 as its initial value
- ☒ Declares a constant a whose value will be 100 **CORRECT**
- ☐ Constructs an integer type variable with a as identifier and 100 as value

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Variables and Constants

☐ Show solution

Question No: 8

Multi Choice Type Question

Report Error

The difference between x and 'x' is

- ☒ The first one refers to a variable whose identifier is x and the second one refers to the character constant x **CORRECT**
- ☐ The first one is a character constant x and second one is the string literal x
- ☐ Both are same
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Variables and Constants **Blooms Taxonomy:** Understand

Question No: 9

Multi Choice Type Question

Report Error

A sequence of instructions or statements is termed as

- ☒ programs **CORRECT**

☐ problem statement☐ snippet☐ None of the listed optionsRecommended Learning Content: [Feedback 1](#) [Feedback 1](#)**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Input and Output Statements **Blooms Taxonomy:** Understand**Question No: 10****Multi Choice Type Question**[Report Error](#)

Which among the following are the naming conventions for identifiers?

☒ Only alphabetic characters, digits and underscores are permitted. **CORRECT**☒ First letter must be an alphabet or underscore (_) **CORRECT**☒ Identifiers are case sensitive **CORRECT**☒ Reserved keywords can not be used as an identifier's name **CORRECT****Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Multiple Correct **Subject:** Programming**Subject:** C++ Programming **Subject:** Variables and Constants**Question No: 11****Multi Choice Type Question**[Report Error](#)

Evaluate the following

(false && true) || false || true

☐ 0

☒ 1

CORRECT

☐ false☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Operators and Expressions **Blooms Taxonomy:** Analyse**Question No:** 12**Multi Choice Type Question****Report Error**

Select the right option.

Given the variables p, q are of char type and r, s, t are of int type

1. $t = (r * s) / (r + s);$ 2. $t = (p * q) / (r + s);$ ☒ 1 is true but 2 is false☐ 1 is false and 2 is true☐ both 1 and 2 are true

CORRECT

☐ both 1 and 2 are false**Status:** Wrong**Mark obtained:** 0/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Operators and Expressions☐ Show solution**Question No:** 13**Multi Choice Type Question****Report Error**

What is the value of the following 8-bit integer after all statements are executed?

`int x = 1;``x = x << 7;``x = x >> 7;`

☒ 1☐ -1☐ 127☐ Implementation defined CORRECTRecommended Learning Content: [Feedback 1](#) [Feedback 1](#)

Status: Wrong Mark obtained: 0/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Input and Output Statements

☐ Show solution

Question No: 14

Multi Choice Type Question

[Report Error](#)

What will be the output of this program?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 8;
6     cout << "ANDing integer 'a' with 'true' :" << a && true;
7     return 0;
8 }
```

☐ ANDing integer 'a' with 'true' :8 CORRECT☐ ANDing integer 'a' with 'true' :0☒ ANDing integer 'a' with 'true' :1☐

None of the listed options

Status: Wrong Mark obtained: 0/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Namespace Blooms Taxonomy: Analyse

Question No: 15

Multi Choice Type Question

Report Error

What will be the output of this program?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int i = 3;
6     int l = i / -2;
7     int k = i % -2;
8     cout << l << k;
9     return 0;
10 }
11
12
13
14
```

☐ compile time error

☒ -1 1 CORRECT

☐ 1 -1

☐ implementation defined

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Namespace Blooms Taxonomy: Analyse

☐ Show solution

Question No: 16

Multi Choice Type Question

Report Error

What is this operator called ? : ?

☒ conditional CORRECT

☐ relational

☐ casting operator

☐ None of the listed options

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Operators and Expressions Blooms Taxonomy: Analyse

☐ Show solution

Question No: 17

Multi Choice Type Question

Report Error

In which direction will the assignment operation take place?

☐ left to right

☒ right to left CORRECT

☐ top to bottom

☐ None of the listed options

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Operators and Expressions Blooms Taxonomy: Analyse

☐ Show solution

Question No: 18

Multi Choice Type Question

Report Error

What is the name of | operator?

☐

sizeof

☒ Binary OR CORRECT☐ and☐ modulus**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Operators and Expressions **Blooms Taxonomy:** Analyse☐ Show solution**Question No:** 19**Multi Choice Type Question****Report Error**

What is the output of this program?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 21;
6
7     int c ;
8
9     c = a++;
10
11     cout << c;
12
13     return 0;
14 }
```

☒ 21 CORRECT☐ 22☐ 23☐ 20**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Operators and Expressions **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 20

Multi Choice Type Question

Report Error

Evaluate $!(1 \ \&\& \ !(0 \ || \ 1))$.



True

CORRECT



False



Unevaluatable

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Operators and Expressions

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_C Course: 2021_25 II_Dat

Attempt 1

IP Address: 2409:4072:6e0a:2e4:6c4a:2e54:43f2:76f0 Tab switches: 23 OS used: Windows

Browser used: Chrome

Test Duration: 00:26:48

Test Start Time: May 14, 2022 | 08:10 PM

Test Submit Time: May 15, 2022 | 12:52 AM

Resume Count: 3

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.22 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.50 / 20
Least score: 6.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

For what values of the expression is an if-statement block not executed?

☐ 0 and all negative values

☒ 0 and -1 CORRECT

☐ 0

☐ 0, all negative values, all positive values except 1

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Branching and Looping Blooms Taxonomy: Analyse

☐ Show solution

Question No: 2

Multi Choice Type Question

Report Error

The switch statement is also called as?

☐ choosing structure

☒ selective structure CORRECT

☐ certain structure

☐ none of the listed options

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Branching and Looping Blooms Taxonomy: Understand

☐ Show solution

Question No: 3

Multi Choice Type Question

Report Error

Label in Goto statement is same like

☒ Case in switch statement CORRECT

☐ Initialization in for loop

☐ Continuation condition in for loop

☐ All of them

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Branching and Looping

Question No: 4

Multi Choice Type Question

Report Error

An if statement may contain compound statements only in the else class.

☐ True

☒ False CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Branching and Looping

Question No: 5

Multi Choice Type Question

Report Error

Comment on the following expression?

$c = (n) ? a : b;$

can be rewritten as

☒ if (n) c = b;
else c = a; CORRECT

☐ if (n <= 0) c = b;
else c = a;

☐ if (n > 0) c = a;
else c = b;

☐ All of the mentioned

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Branching and Looping

Question No: 6

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
using namespace std;
void func(int a, bool flag = true)
{
    if (flag == true ) {
        cout << "Flag is true. a = " << a;
    }
    else {
        cout << "Flag is false. a = " << a;
    }
}
int main()
{
    func(200, false);
    return 0;
}
```

☐ Flag is true. a = 200

☐ Flag is false. a = 100

☒ Flag is false. a = 200 **CORRECT**

☐ Flag is true. a = 100

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Branching and Looping

☐ Show solution

Question No: 7

Multi Choice Type Question

[Report Error](#)

What will the below code return?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int i = 3;
6     switch (i)
7     {
8         case 0+1: cout<<"Hello";
9                 break;
10        case 1+2: cout<<"World";
11                break;
12        default: cout<<"Hello World";
13    }
14    return 0;
15 }
```

☒ World CORRECT☐ Hello World☐ Compiler error☐ Runtime error

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Branching and Looping

☐ Show solution

Question No: 8

Multi Choice Type Question

[Report Error](#)

```
1 What does the following code display?
```

```
2
3 #include<iostream>
4 using namespace std;
5 int N = 10;
6
7 int main()
8 {
```

```
9 static int x = 1;
10 if (cout << x << " " && x++ < N && main())
11 { }
12 return 0;
13 }
```

☐ Compiler error

☐ Runtime Error

☒ 1 2 3 4 5 6 7 8 9 10 CORRECT

☐ 1 2 3 4 5 6 7 8 9

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Hard

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Branching and Looping

☐ Show solution

Question No: 9

Multi Choice Type Question

Report Error

```
1 What is the output of this program?
2
3 #include <iostream>
4 using namespace std;
5 int main() {
6     int a = 10;
7     if (a < 15)
8     {
9         time:
10         cout << a;
11         goto time;
12     }
13     break;
14     return 0;
15 }
```

☐ 1010

☐ 10

10

☐ infinitely print 10☒ compile time error

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Branching and Looping☐ Show solution**Question No:** 10**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
int main ()
{
    int n;
    for (n = 5; n > 0; n--)
    {
        cout << n;
        if (n == 3)
            break;
    }
    return 0;
}
```

☒ 543

CORRECT

☐ 54☐ 5432☐ 53**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Branching and Looping☐ Show solution**Question No: 11****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
int main()
{
    int i;
    for (i = 0; i < 10; i++);
    {
        cout << i;
    }
    return 0;
}
```

☐ 0123456789☒ 10 **CORRECT**☐ 012345678910☐ compile time error**Status: Correct****Mark obtained: 1/1****Hints used: 0****Level: Medium****Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming****Subject: Branching and Looping**☐ Show solution**Question No: 12****Multi Choice Type Question****Report Error**

Which looping process is best used when the number of iterations is known?

☒ for **CORRECT**

- ☒ while
- ☐ do-while
- ☐ all looping processes require that the iterations be known

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping

Question No: 13**Multi Choice Type Question****Report Error**

C++ statements that allow programmers to specify that next statement to be executed may be other than the next one in a sequence, is called as

- ☒ Transfer of control **CORRECT**
- ☐ Transfer of statements
- ☐ Transfer of program
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping **Blooms Taxonomy:** Analyse

Question No: 14**Multi Choice Type Question****Report Error**

Which keyword is used to come out of a loop only for that iteration?

- ☒ break **CORRECT**
- ☐ continue
- ☐ return

☐ All of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping **Blooms Taxonomy:** Analyse

Question No: 15

Multi Choice Type Question

Report Error

Which looping process checks the test condition at the end of the loop?

☐ for

☐ while

☒ do-while **CORRECT**

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping **Blooms Taxonomy:** Analyse

Question No: 16

Multi Choice Type Question

Report Error

Which of the following creates an infinite loop?

☒ for(;;) **CORRECT**

☐ while();

☐ when();

☐ if();

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping

Question No: 17**Multi Choice Type Question****Report Error**

Can a 'for' loop contain another 'for' loop?

☒ Yes**CORRECT**☐ No

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping

Question No: 18**Multi Choice Type Question****Report Error**

A 'while' loop may always be converted to an equivalent 'for' loop.

☒ True**CORRECT**☐ False

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Branching and Looping

Question No: 19**Multi Choice Type Question****Report Error**

What is the output of the below program?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int c = 5, no = 10;
6     do {
7         no /= c;
```

```
8      } while(c--);  
9  
10     cout<< no;  
11     return 0;  
12 }
```

☐ 0☐ 1☒ No Output CORRECT☐ Compiler Error

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Branching and Looping **Blooms Taxonomy:** Analyse

Question No: 20

Multi Choice Type Question

Report Error

The correct syntax for running two variable for loop simultaneously is.

☐ for (i = 0; i < n; i++)
for (j = 0; j < n; j += 5)☒ for (i = 0, j = 0; i < n, j < n; i++, j
+= 5) CORRECT☐ for (i = 0; i < n; i++){}
for (j = 0; j < n; j += 5){}☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Branching and Looping **Blooms Taxonomy:** Analyse

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_A Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 35 OS used: Windows Browser used: Chrome

Test Duration: 00:36:31

Test Start Time: May 18, 2022 | 10:24 AM

Test Submit Time: May 18, 2022 | 11:01 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.56 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 18.71 / 20
Least score: 1.00 / 20

Overall Question Status



Total Questions: 20
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MCQ - Question Status



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Question Wrong: 8
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Data in an array can be distinguished using _____ number.

☐ Reference



Subscript

CORRECT

☐ Array☐ ID**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No: 2****Multi Choice Type Question****Report Error**What is the use of `is_array()` function in C++?☒ To check if a variable is array type or not CORRECT☐ To check if a variable is 1-D array type or not☐ To check if a variable is 2-D array type or not☐ To check if a variable is 1-D or 2-D array type or not**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No: 3****Multi Choice Type Question****Report Error**

In general, the index of the first element in an array is _____

☒ 0 CORRECT☐ -1☐ 2

☐ 1**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No: 4****Multi Choice Type Question****Report Error**

Assuming int is of 4bytes, what is the size of int arr[15];?

☐ 15☐ 11☐ 19☒ 60**CORRECT****Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No: 5****Multi Choice Type Question****Report Error**

Elements in an array are accessed _____

☒ randomly**CORRECT**☐ sequentially☐ exponentially☐ logarithmically

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No: 6****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include<iostream>
using namespace std;
int main()
{
int array[] = {10, 20, 30};
cout << -2[array];
return 0;
}
```

☐ -15☐ -30

CORRECT

☒ compile time error☐ garbage value**Status:** Wrong**Mark obtained:** 0/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Blooms Taxonomy:** Understand☐ Show solution**Question No: 7****Multi Choice Type Question****Report Error**

Which of the following gives the memory address of the first element in array?

☐ array[0];☐ array[2];☐ array[1];



array;

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Question No: 8

Multi Choice Type Question

Report Error

What will be the output of this program?

```
1 #include <iostream>
2 using namespace std;
3 int array1[] = {1200, 200, 2300, 1230, 1543};
4 int array2[] = {12, 14, 16, 18, 20};
5 int temp, result = 0;
6 int main()
7 {
8     for (temp = 0; temp < 5; temp++)
9     {
10         result += array1[temp];
11     }
12     for (temp = 0; temp < 4; temp++)
13     {
14         result += array2[temp];
15     }
16     cout << result;
```



6553



6533

CORRECT



6522



12200

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Blooms Taxonomy: Analyse

☐ Show solution

Question No: 9

Multi Choice Type Question

Report Error

Using array in a program is efficient because _____

- ☐ It shortens the program.
- ☐ The program compiles faster
- ☒ Number of variables are reduced.
- ☐ Data is accessed faster CORRECT

Status: Wrong Mark obtained: 0/1 Hints used: 0 Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Question No: 10

Multi Choice Type Question

Report Error

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

```
1  #include <iostream>
2  #include <string>
3  using namespace std;
4  int main()
5  {
6      cout<<is_array<int>::value;
7      cout<<is_array<char[10]>::value;
8      cout<<is_array<string>::value;
9      return 0;
10 }
```

☒ 010 CORRECT

☐ 101

☐ 001

☐ 110

110

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No:** 11**Multi Choice Type Question****Report Error**

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

```
1 #include <iostream>
2 #include <string>
3 using namespace std;
4 int main()
5 {
6     cout<<rank<int[10]>::value;
7     cout<<rank<char[10][10]>::value;
8     cout<<rank<string[10][10][10]>::value;
9     return 0;
10 }
```

☐ 111☒ 123

CORRECT

☐ 321☐ 121**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays**Question No:** 12**Multi Choice Type Question****Report Error**

Which of the following declaration are illegal?

☐ (A) `int a[][] = {{1, 2, 3}, {2, 3, 4, 5}};` CORRECT

☒ (B) `int *a[] = {{1, 2, 3}, {2, 3, 4, 5}};`

☐ (C) `int a[4][4] = {{1, 2, 3}, {2, 3, 4, 5}};`

☐ (D) Both (A) and (B).

Status: Wrong

Mark obtained: 0/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Question No: 13

Multi Choice Type Question

Report Error

Consider the following declaration of a 'two-dimensional array in C:

`char a[100][100];`

Assuming that the main memory is byte-addressable and that the array is stored starting from memory address 0, the address of `a[40][50]` is

☒ 4040

☐ 4050 CORRECT

☐ 5040

☐ 5050

Status: Wrong

Mark obtained: 0/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

☐ Show solution

Question No: 14

Multi Choice Type Question

Report Error

Consider the statement

```
int val[2][4] = { 1, 2, 3, 4, 5, 6, 7, 8};
```

4 will be the value of

☐ val[0][3]

☒ val[0][4]

☐ val[1][1]

☐ None of the listed options CORRECT

Status: Wrong

Mark obtained: 0/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Blooms Taxonomy: Understand

Question No: 15

Multi Choice Type Question

Report Error

If arr is a two dimensional array of 10 rows and 12 columns, then arr (5) logically points to the

☐ sixth row CORRECT

☒ Fifth row

☐ fifth column

☐ sixth column

Status: Wrong

Mark obtained: 0/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Question No: 16

Multi Choice Type Question

Report Error

Which is true for a, if a is defined as "int a[10][20];"?

- ☐ a is true two-dimensional array
- ☐ 200 int-sized locations have been set aside
- ☐ The conventional rectangular subscript calculation $20 * \text{row} + \text{col}$ is used to find the element `a[row, col]`.

☒ All of the listed options **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Arrays **Blooms Taxonomy:** Understand

Question No: 17

Multi Choice Type Question

Report Error

Which among the following 2D array declaration(s) is/are correct?

- (1) `int array2D[2][4] = {1,2,3,4,5,6,7,8};`
(2) `int array2D[][4] = {1,2,3,4,5,6,7,8};`
(3) `int array2D[2][] = {1,2,3,4,5,6,7,8};`
(4) `int array2D[][] = {1,2,3,4,5,6,7,8};`

- ☐ 1
- ☐ 1,2 **CORRECT**
- ☐ 1,2,3
- ☒ 1,2,3,4

Status: Wrong **Mark obtained:** 0/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Arrays

Question No: 18

Multi Choice Type Question

Report Error

Maximum number of elements in the array declaration `int a[5][8]` is

☐ 28☐ 32☐ 35☒ 40

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Question No: 19

Multi Choice Type Question

[Report Error](#)

```
int testarray[3][2][2] = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12};
```

What value does `testarray[2][1][0]` in the sample code above contain?

☐ 3☐ 5☒ 11

CORRECT

☐ 9

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Arrays

Question No: 20

Multi Choice Type Question

[Report Error](#)

If array is of String type all values are _____ by default.



☐ null☐ Null☐ 0☐ Nothing

CORRECT

Status: Wrong**Mark obtained:** 0/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Arrays

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_S1 Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 0 OS used: Windows Browser used: Chrome

Test Duration: 00:02:03

Test Start Time: May 21, 2022 | 02:51 PM

Test Submit Time: May 21, 2022 | 02:54 PM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.31 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 18.51 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

How to declare a wide character in string literal?



L prefix

CORRECT



☐ I prefix☐ W prefix☐ none of the mentioned**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Strings☐ Show solution**Question No: 2****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
#include <cstring>
using namespace std;
int main ()
{
char str1[10] = "Hello";
char str2[10] = "World";
char str3[10];
int len ;
strcpy( str3, str1);
strcat( str1, str2);
len = strlen(str1);
cout << len << endl;
return 0;
}
```

☐ 5☐ 55☐ 11☒ 10

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

☐ Show solution

Question No: 3

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
#include <string>
using namespace std;
int main ()
{
    string str ("microsoft");
    string::reverse_iterator r;
    for (r = str.rbegin() ; r < str.rend(); r++ )
        cout << *r;
    return 0;
}
```

☐ microsoft

☐ micro

☒ tfosorcim **CORRECT**

☐ tfos

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

☐ Show solution

Question No: 4

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
#include <string>
```



```
using namespace std;
int main ()
{
string str ("Microsoft");
for (size_t i = 0; i < str.length();)
{
cout << str.at(i-1);
}
return 0;
}
```

☐ M☐ Microsoft☐ Micro☒ runtime error

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Strings

☐ Show solution

Question No: 5

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
#include <iostream>
#include <string>
using namespace std;
int main ()
{
string str ("Ubuntu");
cout << str.capacity();
cout << str.max_size();
return 0;
}
```

☐ 61073741820

☒ 154611686018427387903 CORRECT

☐ 6 and max size depends on compiler

☐ none of the mentioned

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Strings

☐ Show solution

Question No: 6

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
#include <string>
#include<typeinfo>
using namespace std;
int main( )
{
try
{
string strg1("Test");
string strg2("ing");
strg1.append(strg2, 4, 2);
cout << strg1 << endl;
}
catch (exception &e)
{
cout << "Caught: " << e.what() << endl;
cout << "Type: " << typeid(e).name() << endl;
};
return 0;
}
```

☒ out of range CORRECT

☐ bad type_id

☐

bad allocation

☐ none of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Strings

☐ Show solution

Question No: 7

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
#include <string>
using namespace std;
int main ()
{
    string mys;
    char mya[20]= "Hello world";
    mys = mya;
    cout << mys << '\n';
    return 0;
}
```

☒ Hello world **CORRECT**

☐ Hello

☐ Error

☐ Runtime error

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Strings

☐ Show solution

Question No: 8

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
1 #include <iostream>
2 #include <string>
3 using namespace std;
4 int main ( )
5 {
6     string name ("Jobs");
7     string family ("Steve");
8     name += " Apple ";
9     name += family;
10    name += '\n';
11    cout << name;
12    return 0;
13 }
14
```

☐ Steve Jobs

☐ Apple

☒ Jobs Apple Steve **CORRECT**

☐ None of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Strings

☐ Show solution

Question No: 9

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
1. #include <iostream>
2. #include <string>
3. using namespace std;
4. int main ( )
5. {
6.     string str="Steve Jobs founded the apple";
7.     string str2 = str.substr (6, 4);
```

```
8. unsigned pos = str.find("the");
9. string str3 = str.substr (pos);
10. cout << str2 << ' ' << str3 << '\n';
11. return 0;
12. }
```

☒ Jobs the apple CORRECT

☐ the apple

☐ Steve

☐ Jobs

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Strings

☐ Show solution

Question No: 10

Multi Choice Type Question

Report Error

What is the output of this program?

```
1. #include <iostream>
2. #include <string>
3. using namespace std;
4. int main ( )
5. {
6. string str ("Steve jobs");
7. cout << str.length( );
8. return 0;
9. }
```

☐ 8

☒ 10 CORRECT

☐ 12☐ 9**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Strings☐ Show solution**Question No:** 11**Multi Choice Type Question****Report Error**

Which is true about function tolower?

☐ The function tolower is defined in☐ Converts an upper case letter to lower case☐ returns other characters untouched☒ None of the mentioned **CORRECT****Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Strings**Question No:** 12**Multi Choice Type Question****Report Error**

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

☐ -1☐ 1☒ 0 **CORRECT**☐

Yes

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

Question No: 13**Multi Choice Type Question****Report Error**

String operation such as strcat(s, t), strcmp(s, t), strcpy(s, t) and strlen(s) heavily rely upon.

☒ Presence of NULL character **CORRECT**

☐ Presence of new-line character

☐ Presence of any escape sequence

☐ None of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

Question No: 14**Multi Choice Type Question****Report Error**

What is the use of getchar()?

☒ The next input character each time it is called EOF when it encounters end of file **CORRECT**

☐ The next input character each time it is called

☐ EOF when it encounters end of file

☐ None of the mentioned above

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

Question No: 15**Multi Choice Type Question****Report Error**

The end of the string is marked with ____ special character.

☒ \0'

CORRECT

☐ 0☐ any one of above☐ none of the above

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

Question No: 16**Multi Choice Type Question****Report Error**

Which of the below functions is NOT declared in string.h?

☒ strcpy()

CORRECT

☐ strcpy()☐ strlen()☐strupr()

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

☐ Show solution

Question No: 17

Multi Choice Type Question

[Report Error](#)

Which of the following function is used to find the first occurrence of a given string in another string?

☐ strchr()☐ strrchr()☒ strstr() CORRECT☐ strnset()

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Strings

Question No: 18

Multi Choice Type Question

[Report Error](#)

A string is terminated by a

☒ Null CORRECT☐ Boolean value☐ Space☐ Semicolon

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Strings

Question No: 19

Multi Choice Type Question

[Report Error](#)

Which header file is used to manipulate the string?

☐ iostream☐ iomanip☒ string **CORRECT**☐ container

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

☐ Show solution

Question No: 20

Multi Choice Type Question

[Report Error](#)

What will happen if a string is empty?

☐ It can't be created☐ Raises an error☒ It can be used **CORRECT**☐ None of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Strings

☐ Show solution

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_P Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 0 OS used: Windows Browser used: Chrome

Test Duration: 00:01:19

Test Start Time: May 21, 2022 | 02:54 PM

Test Submit Time: May 21, 2022 | 02:56 PM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.51 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 18.72 / 20
Least score: 5.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Choose the right option
string* x, y;

☒ x is a pointer to a string, y is a string **CORRECT**

- ☐ y is a pointer to a string, x is a string
- ☐ both x and y are pointer to string types
- ☐ none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Pointers **Blooms Taxonomy:** Understand

☐ Show solution

Question No: 2 **Multi Choice Type Question**

Report Error

Which one of the following is not a possible state for a pointer.

- ☐ hold the address of the specific object
- ☐ point one past the end of an object
- ☐ zero

☒ point to a type **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Pointers

☐ Show solution

Question No: 3 **Multi Choice Type Question**

Report Error

Which of the following is illegal?

- ☐ int *ip;
- ☐ string s, *sp = 0;

☒ `int i; double* dp = &i;` **CORRECT**

☐ `int *pi = 0;`

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers

☐ Show solution

Question No: 4

Multi Choice Type Question

Report Error

What will happen in this code?

```
int a = 100, b = 200;
```

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

```
p = q;
```

☐ b is assigned to a

☒ p now points to b **CORRECT**

☐ a is assigned to b

☐ q now points to a

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers

☐ Show solution

Question No: 5

Multi Choice Type Question

Report Error

Identify the incorrect statement

☐ reference is the alternate name of the object

☐

A reference value once defined can be

☒ A reference value once defined cannot be reassigned **CORRECT**

☐ none of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 6

Multi Choice Type Question

Report Error

Void pointer can point to which type of objects?

☐ int

☐ float

☐ double

☒ all of the mentioned **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers

☐ Show solution

Question No: 7

Multi Choice Type Question

Report Error

When can the void pointer being dereferenced?

☐ when it doesn't point to any value

☒ when it cast to another type of object **CORRECT**

☐ using delete keyword☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers **Blooms Taxonomy:** Analyse☐ Show solution**Question No: 8****Multi Choice Type Question****Report Error**

What happens when a null pointer is converted into bool?

☐ An error is flagged☐ bool value evaluates to true☒ bool value evaluates to false **CORRECT**☐ the statement is ignored**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers☐ Show solution**Question No: 9****Multi Choice Type Question****Report Error**

Suppose in a hypothetical machine, the size of char is 32 bits. What would sizeof(char) return?

☐ 4☒ 1 **CORRECT**☐ Implementation dependent

☐ Machine dependent

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers

☐ Show solution

Question No: 10

Multi Choice Type Question

Report Error

Identify the incorrect statements.

```
1 int var = 10;  
2 int *ptr = &(var + 1);           //statement 1  
3 int *ptr2 = &var;               //statement 2  
4 &var = 40;                      //statement 3  
5
```

☐ Statement 1 and 2 are wrong

☐ Statement 2 and 3 are wrong

☒ Statement 1 and 3 are wrong **CORRECT**

☐ All the three are wrong

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers

☐ Show solution

Question No: 11

Multi Choice Type Question

[Report Error](#)

What does the following statement mean?
`int (*fp)(char*)`

- ☐ pointer to a pointer
- ☐ pointer to an array of chars
- ☒ pointer to function taking a char* argument and returns an int **CORRECT**
- ☐ function taking a char* argument and returning a pointer to int

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers

Question No: 12

Multi Choice Type Question

[Report Error](#)

Which reference modifier is used to define the reference variable?

- ☒ & **CORRECT**
- ☐ \$
- ☐ #
- ☐ None of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers **Blooms Taxonomy:** Analyse

Question No: 13

Multi Choice Type Question

[Report Error](#)

Which of the following are member de-referencing operators in C++?

1. *
2. ::
3. ->*
4. ::*
5. ->

☐ Only 1,3, 5

☐ Only 2 and 3

☐ Only 3 and 4

☒ Only 1,3, 4 **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Pointers

Question No: 14

Multi Choice Type Question

Report Error

Predict the output of the following program?

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 32, *ptr = &a;
6     char ch = 'A', &cho = ch;
7     cho += a;
8     *ptr += ch;
9     cout << a << ", " << ch << endl;
10    return 0;
11 }
12
13
```

☐ 32,A

☐ 32,a

☐ 129,A☒ 129,a CORRECT

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Pointers

☐ Show solution**Question No: 15****Multi Choice Type Question****Report Error**

Predict the output of the below code.

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 10, *pa, &ra;
6     pa = &a;
7     ra = a;
8     cout << "a=" << ra;
9     return 0;
10 }
11
```

☐ 10☐ Garbage value☒ Compiler error CORRECT☐ Run-time error

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Pointers

☐ Show solution

Question No: 16

Multi Choice Type Question

[Report Error](#)

Predict the output of the below code.

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     const int i = 20;
6     const int* const ptr = &i;
7     (*ptr)++;
8     int j = 15;
9     ptr = &j;
10    cout << i;
11    return 0;
12 }
13
```

☐ 20☐ 21☐ 22☒ Compiler Error CORRECT

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Pointers

☐ Show solution

Question No: 17

Multi Choice Type Question

[Report Error](#)

The pointer which can point to any variable that is

☐ const and static☒ const and volatile CORRECT

☐ const only☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers **Blooms Taxonomy:** Analyse**Question No: 18****Multi Choice Type Question****Report Error**

What will be the output of the following program?

```
#include <iostream>
using namespace std;
int main()
{
    int arr[] = { 4, 5, 6, 7 };
    int* p = (arr + 1);
    cout << *arr + 10;
    return 0;
}
```

☐ 12☐ 13☒ 14

CORRECT

☐ 15**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers☐ Show solution**Question No: 19****Multi Choice Type Question****Report Error**

```
1 What is the output of the below code?  
2  
3 #include<iostream>  
4 using namespace std;  
5 int main()  
6 {  
7     int a = 10;  
8     int &b = a;  
9     b++;  
10    cout<<a;  
11 }  
12
```

☐ 10

☒ 11 CORRECT

☐ Garbage value

☐ Compile time error for invalid syntax

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Hard

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Pointers

☐ Show solution

Question No: 20

Multi Choice Type Question

Report Error

```
1 Predict the output of the below code.  
2  
3 char *p = NULL;  
4 int main()  
5 {  
6     *p = 100;  
7     cout<<*p;  
8 }
```

☐ NULL☐ 100☒ Run time error **CORRECT**☐ Compile time error**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Pointers☐ Show solution

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_FL Course: 2021_25 II_Dat

Attempt 1

IP Address: 49.37.136.246 Tab switches: 1 OS used: Windows Browser used: Chrome

Test Duration: 00:01:47

Test Start Time: May 24, 2022 | 06:51 AM

Test Submit Time: May 24, 2022 | 06:53 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.79 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.03 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 1
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 1
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

What will happen when we use void in argument passing?

☒ (A) It will not return value to its caller **CORRECT**

☒ (B) It will return value to its caller

☐ (C) both A & B are correct

☐ (D) none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 2

Multi Choice Type Question

Report Error

What are mandatory parts in a function declaration?

☒ (A) return type,function name **CORRECT**

☐ (B) return type,function name,parameters

☐ (C) both A and B

☐ (D) none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions **Blooms Taxonomy:** Apply

☐ Show solution

Question No: 3

Multi Choice Type Question

Report Error

which of the following is used to terminate the function declaration?

☐ :

☐)



;

CORRECT



none of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Functions **Blooms Taxonomy:** Analyse**Question No: 4****Multi Choice Type Question****Report Error**

Which is more effective while calling the functions?



call by value



call by reference

CORRECT



call by pointer



none of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Functions **Blooms Taxonomy:** Analyse

Show solution

Question No: 5**Multi Choice Type Question****Report Error**

What is the scope of the variable declared in the user defined function?



(A) whole program



(B) only inside the {} block

CORRECT



(C) both A and B



(D) none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Functions **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 6 **Multi Choice Type Question**

Report Error

How many ways of passing a parameter are there in c++?

☐ 1

☐ 2

☒ 3 **CORRECT**

☐ 4

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Functions

☐ Show solution

Question No: 7 **Multi Choice Type Question**

Report Error

Which is used to keep the call by reference value intact?

☐ static

☒ const **CORRECT**

☐ absolute

☐ none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Functions **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 8

Multi Choice Type Question

Report Error

By default how the value is passed in c++?

☐ call by value **CORRECT**

☐ call by reference

☐ call by pointer

☒ none of the listed options

Status: Wrong **Mark obtained:** 0/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Functions **Blooms Taxonomy:** Apply

Question No: 9

Multi Choice Type Question

Report Error

What will you use if you are not intended to get a return value?

☐ static

☐ const

☐ volatile

☒ void **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Functions

☐ Show solution

Question No: 10

Multi Choice Type Question

[Report Error](#)

Where does the return statement returns the execution of the program?

- ☐ main function
- ☒ caller function **CORRECT**
- ☐ same function
- ☐ none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Functions **Blooms Taxonomy:** Analyse

Question No: 11

Multi Choice Type Question

[Report Error](#)

What will happen while using pass by reference

- ☐ The values of those variables are passed to the function so that it can manipulate them
- ☒ The location of variable in memory is passed to the function so that it can use the **CORRECT** same memory area for its processing
- ☐ The function declaration should contain ampersand (& in its type declaration)
- ☐ All of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions

☐ Show solution

Question No: 12

Multi Choice Type Question

Report Error

What are the advantages of passing arguments by reference?

☐ Changes to parameter values within the function also affect the original arguments.

☐ There is need to copy parameter values (i.e. less memory used)

☐ There is no need to call constructors for parameters (i.e. faster)

☒ All of the mentioned **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions

Question No: 13

Multi Choice Type Question

Report Error

Which value will it take when both user and default values are given?

☒ user value **CORRECT**

☐ default value

☐ custom value

☐ none of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions **Blooms Taxonomy:** Apply☐ Show solution**Question No: 14****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
void copy (int& a, int& b, int& c)
{
    a *= 2;
    b *= 2;
    c *= 2;
}
int main ()
{
    int x = 1, y = 3, z = 7;
    copy (x, y, z);
    cout << "x =" << x << ", y =" << y << ", z =" << z;
    return 0;
}
```

☐ 2 5 10☐ 2 4 5☒ 2 6 14 **CORRECT**☐ none of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** C++ Programming**Subject:** Functions**Blooms Taxonomy:** Analyse☐ Show solution**Question No: 15****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
```

```
using namespace std;
void Sum(int a, int b, int & c)
{
    a = b + c;
    b = a + c;
    c = a + b;
}
int main()
{
    int x = 2, y = 3;
    Sum(x, y, y);
    cout << x << " " << y;
    return 0;
}
```

☐ 2 3☐ 6 9☒ 2 15 **CORRECT**☐ compile time error

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions

☐ Show solution

Question No: 16

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
using namespace std;
void square (int *x)
{
    *x = (*x + 1) * (*x);
}
int main ( )
{
    int num = 10;
```



```
square(&num);  
cout << num;  
return 0;  
}
```

☐ 100☐ compile time error☐ 144☒ 110

CORRECT

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Functions☐ Show solution**Question No:** 17**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>  
using namespace std;  
long factorial (long a)  
{  
    if (a > 1)  
        return (a * factorial (a + 1));  
    else  
        return (1);  
}  
int main ()  
{  
    long num = 3;  
    cout << num << " ! = " << factorial ( num );  
    return 0;  
}
```

☐ 6☐

24

☒ segmentation fault CORRECT☐ compile time error**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Functions☐ Show solution**Question No: 18****Multi Choice Type Question****Report Error**

Predict the output of the following code.

```
1 #include <iostream>
2 using namespace std;
3 void fun1(int x)
4 {
5     cout<<x<<endl;
6 }
7 int main()
8 {
9     //function calling
10    fun1(10,20);
11    return 0;
12 }
13
```

☐ 10
20☐ 10 20☐ Run Time error☒ Compile time error CORRECT**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Functions☐ Show solution**Question No: 19****Multi Choice Type Question****Report Error**

Predict the output.

```
1 #include <iostream>
2 using namespace std;
3 void print_value(int x,int y=10)
4 {
5     cout<<x<<y<<endl;
6 }
7 int main()
8 {
9     print_value(100);
10    return 0;
11 }
12
```

☒ 100 10 **CORRECT**☐ 100 100☐ Compiler Error☐ 100 Garbage value**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Functions☐ Show solution**Question No: 20****Multi Choice Type Question****Report Error**

What is the output of the following code?

```
1 #include<iostream>
2 using namespace std;
3 int fun(int x = 0, int y = 0, int z)
4 {
5     return (x + y + z);
6 }
```

```
5     return x * y * z;\n6 }\n7 int main()\n8 {\n9     cout << fun(10);\n10    return 0;\n11 }\n12
```

☐ 10

☐ 20

☒ Compiler Error CORRECT

☐ Runtime Error

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Functions

☐ Show solution

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_S1 Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 2 OS used: Windows Browser used: Chrome

Test Duration: 00:03:50

Test Start Time: May 30, 2022 | 09:23 AM

Test Submit Time: May 30, 2022 | 09:28 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.29 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.04 / 20
Least score: 7.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

In order to save memory during the execution of a complex program, use

☐ structures



☒ union

CORRECT

☐ templates☐ classes**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions**Question No: 2****Multi Choice Type Question****Report Error**

All the addresses of union variables are

☒ same

CORRECT

☐ different☐ dependent on the compiler☐ predefined**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions**Question No: 3****Multi Choice Type Question****Report Error**

The keyword used to define a structure is

☒ struct

CORRECT

☐ structure☐ structures

str

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions**Question No:** 4**Multi Choice Type Question****Report Error**

Can a Structure contain pointer to itself?



Yes

CORRECT



No

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions**Question No:** 5**Multi Choice Type Question****Report Error**

What is Self Referential Structure?



Structure which contains pointers



Structure which has pointer to itself

CORRECT



Structure which contains another structure with a pointer



None of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions **Blooms Taxonomy:** Analyse

Question No: 6

Multi Choice Type Question

[Report Error](#)

Can we declare structure inside structure?



Yes

CORRECT



No

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Structures and Unions

Question No: 7

Multi Choice Type Question

[Report Error](#)

Structure variables may be passed as arguments to functions



True

CORRECT



False

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Structures and Unions

Question No: 8

Multi Choice Type Question

[Report Error](#)

Which of the following accesses a variable in structure *b?



b->var;

CORRECT



b.var;



b-var;



b>var;

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions**Question No:** 9**Multi Choice Type Question****Report Error**

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

```
1 #include <iostream>
2 #include <string.h>
3 using namespace std;
4 int main() {
5     struct student{
6         int num;
7         char name[25];
8     };
9     struct student stu;
10    stu.num = 123;
11    strcpy(stu.name, "john");
12    cout << stu.num << endl;
13    cout << stu.name << endl;
14
15    return 0;
16 }
```

☒ 123
john

CORRECT

☐ john
john☐ compile time error☐ runtime error**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions**Question No:** 10**Multi Choice Type Question****Report Error**

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

```
1 #include <iostream>
2 using namespace std;
3 struct Time{
```

```
3 struct Time{
4     int hours, minutes, seconds;
5 };
6 int toSeconds(Time now);
7 int main() {
8     Time t;
9     t.hours = 5;
10    t.minutes = 30;
11    t.seconds = 45;
12    cout << "Total seconds: " << toSeconds(t) << endl;
13    return 0;
14 }
15 int toSeconds (Time now){
16     return 3600 * now.hours + 60 * now.minutes + now.seconds;
```



19845

CORRECT



20000



15000



19844

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Structures and Unions

Question No: 11

Multi Choice Type Question

Report Error

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

```
1 #include <iostream>
2 using namespace std;
3 struct sec
4 {
5     int a;
6     char b;
7 };
8 int main()
9 {
10    struct sec s ={25,50};
11    struct sec *ps =(struct sec *)&s;
12    cout << ps->a << ps->b;
13    return 0;
14 }
```

☒ 252

CORRECT

☐ 253☐ 254☐ 262

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Structures and Unions

Question No: 12

Multi Choice Type Question

[Report Error](#)

What will be the output of the below code

```
1 #include <iostream>
2 using namespace std;
3 typedef struct s1 {
4     int a;
5     float b;
6     union g1 {
7         char c;
8         double d;
9     } new2;
10 } new1;
11 int main()
12 {
13     cout << sizeof(new1);
14 }
```

☐ 17☒ 16

CORRECT

☐ 8☐ 9

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions☐ Show solution**Question No:** 13**Multi Choice Type Question****Report Error**

Predict the output of the following code.

```
1 #include <iostream>
2 using namespace std;
3 typedef struct s1 {
4     int a;
5     float b;
6     union g1 {
7         double c;
8         double d;
9     } new2;
10 } new1;
11 int main()
12 {
13     cout << sizeof(new1) << endl;
14     new1 obj;
15     obj.new2.d = 17;
16     obj.new2.c = 20;
```

☐ 17 20☒ 16 20 **CORRECT**☐ 20 17☐ 20 16**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Structures and Unions☐ Show solution**Question No:** 14**Multi Choice Type Question****Report Error**

Which one is always faster in writing on C++?

☐ Writing to a file☒ Writing to a memory **CORRECT**☐ Reading from the network☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: File Handling

☐ Show solution**Question No: 15****Multi Choice Type Question****Report Error**

Which header file is used for reading and writing to a file?

☐ /include☒ #include **CORRECT**☐ &include☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: File Handling

Question No: 16**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <stdio.h>
int main ()
{
FILE * p;
```

```
long size;
p = fopen ("test.txt", "rb");
if (p == NULL)
perror ("Error opening file");
else
{
fseek (p, 0, SEEK_END);
size = ftell (p);
fclose (p);
printf (" %ld\n", size);
}
return 0;
}
```

☐ 10☐ 20☐ 5☒ Depends upon the file **CORRECT****Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** File Handling☐ Show solution**Question No:** 17**Multi Choice Type Question****Report Error**

What is the output of this program in the file?

```
#include <stdio.h>
int main ( )
{
freopen ("myfile.txt", "w", stdout);
printf ("This sentence is redirected to a file");
fclose (stdout);
return 0;
}
```



☐ This sentence☐ This sentence is redirected☒ This sentence is redirected a file **CORRECT**☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** File Handling☐ Show solution**Question No: 18****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <stdio.h>
int main ( )
{
int n;
FILE * p;
char buffer [5];
p = fopen ("myfile.txt", "w+");
for ( n = 'A' ; n <= 'D' ; n++)
fputc ( n, p);
rewind (p);
fread (buffer, 1, 5, p);
fclose (p);
buffer[3] = '\0';
puts (buffer);
return 0;
}
```

☐ ABCD☒ ABC **CORRECT**☐ ABCDE

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: File Handling

☐ Show solution

Question No: 19

Multi Choice Type Question

Report Error

What is the output of this program in the text file?

```
#include <stdio.h>
int main ()
{
FILE * p;
char buffer[] = { 'x' , 'y' , 'z' };
p = fopen ( "myfile.txt" , "wb" );
fwrite (buffer , 1 , sizeof(buffer) , p );
fclose (p);
return 0;
}
```

☒ xyz

CORRECT

☐ zyx

☐ yxz

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: File Handling

☐ Show solution

Question No: 20

Multi Choice Type Question

Report Error

It is not possible to combine two or more file opening mode in open () method.

☐ True☒ False

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** File Handling

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_CI Course: 2021_25 II_Dat

Attempt 1

IP Address: 49.37.136.26 Tab switches: 2 OS used: Windows Browser used: Chrome

Test Duration: 00:05:26

Test Start Time: May 27, 2022 | 09:27 PM

Test Submit Time: May 27, 2022 | 11:11 PM

Resume Count: 1

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.97 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.13 / 20
Least score: 10.25 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 0
Partially Correct: 1
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 0
Partially Correct: 1
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

A blueprint for any functional entity which defines its properties and its functions.



Class

CORRECT



Function

☐ Object

☐ Macro

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Classes and Objects

Question No: 2

Multi Choice Type Question

Report Error

Allocation of memory to objects at the time of their construction is known as

☐ run time construction

☒ dynamic construction CORRECT

☐ initial construction

☐ static construction

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Classes and Objects

Question No: 3

Multi Choice Type Question

Report Error

For automatic objects, constructors and destructors are called each time the objects

☒ enter and leave scope CORRECT

☐ inherit parent class

☐ are constructed

☐

are destroyed

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

Question No: 4

Multi Choice Type Question

Report Error

Is it mandatory to invoke/call a constructor for creating an object?

☒ Yes

CORRECT

☐ No

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

Question No: 5

Multi Choice Type Question

Report Error

Is it possible to define a constructor with default arguments?

☒ Yes

CORRECT

☐ No

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

Question No: 6

Multi Choice Type Question

Report Error

The explicit keyword is an optional decoration for the constructors that takes exactly

☐ No argument

☒ One Argument CORRECT

☐ Two Arguments

☐ Three Arguments

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Classes and Objects

Question No: 7

Multi Choice Type Question

Report Error

A constructor that accepts no parameters is called as

☒ Default Constructor CORRECT

☐ Null Constructor

☐ Void Constructor

☐ Implicit Constructor

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Classes and Objects

Question No: 8

Multi Choice Type Question

Report Error

How many constructors can present in a class?

☐ 1

☐ 2

☐ 3

☒ multiple CORRECT

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy
Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming
Subject: Classes and Objects

☐ Show solution

Question No: 9

Multi Choice Type Question

Report Error

How to store the large objects in c++ if it extends its allocated memory?

☒ memory heap CORRECT

☐ stack

☐ queue

☐ None of the listed options

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy
Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming
Subject: Classes and Objects

Question No: 10

Multi Choice Type Question

Report Error

Pick out the other definition of objects.

☐ member of the class

☐ associate of the class

☐ attribute of the class

☒ instance of the class CORRECT

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Classes and Objects

Question No: 11**Multi Choice Type Question****Report Error**

What happens when a class with parameterized constructors and having no default constructor is used in a program and we create an object that needs a zero-argument constructor?

☒ Compile Time error **CORRECT**

☐ Pre-processing Error

☐ Runtime Error

☐ Runtime Exception

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Classes and Objects

Question No: 12**Multi Choice Type Question****Report Error**

Assume class TEST. Which of the following statements is/are responsible to invoke the copy constructor?

1. TEST T2(T1)
2. TEST T4 = T1
3. T2 = T1

☐ Only 1

☐ Only 2

☒ Only 1 and 2 **CORRECT**

☐ All of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

Question No: 13

Multi Choice Type Question

Report Error

Destructor has the same name as the constructor and it is preceded by

☐ !

☒ ~

CORRECT

☐ *

☐ &

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

Question No: 14

Multi Choice Type Question

Report Error

Predict the output of following program?

```
1 #include <iostream>
2 using namespace std;
3 class Test
4 {
5     private:
6     int x;
7     public:
8     Test(int i)
9     {
10         x = i;
11         cout << "Called" << endl;
12     }
13 };
14 int main()
15 {
16     Test t(20);
```


☐ Compiler Error☒ Called
Called **CORRECT**☐ Called☐ Runtime Error**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Classes and Objects☐ Show solution**Question No: 15****Multi Choice Type Question****Report Error**

What happens when the copy constructor is declared private?

☐ Objects cannot be created for that class☒ Objects can be created but cannot be copied **CORRECT**☐ The programs hits a compiler or a runtime error☐ Objects can be created and used normally.**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Classes and Objects**Question No: 16****Multi Choice Type Question****Report Error**

Which of the following represent the differences between a copy constructor and an assignment operator?

Copy constructor allocates separate memory for the newly created target object and the source object and the assignment operator allocates same memory location to the newly created target object as well as source object.



CORRECT

A copy constructor is an overloaded constructor where as an assignment operator is a bitwise operator.



CORRECT

If you do not explicitly define a copy constructor then the compiler provides one. On the other hand, if you do not overload an assignment operator then a bitwise copy operation is performed.



CORRECT

A copy constructor is initialized whenever a new object is initialized with an already existing object, when an object is passed to a function as a non reference parameter, or when an object is returned from a function. On the other hand, an assignment operator is invoked only when an object is being assigned to another object.



CORRECT

Status: Partially correct **Mark obtained:** 0.25/1 **Hints used:** 0

Level: Medium **Question type:** MCQ Multiple Correct **Subject:** Programming

Subject: C++ Programming **Subject:** Classes and Objects

Question No: 17

Multi Choice Type Question

Report Error

What is the output of the below code?

```
1 include <iostream>
2 using namespace std;
3
4 class constructor
5 {
6     int a;
7     public:
8     constructor(int x)
9     {
10         a = x;
11     }
12
13     void display()
14     {
15         cout<< "a: "<<a << endl;
16     }
```

☒ a: 10
a: 10 **CORRECT**

☐ a: 10

☐ Compiler Error

☐ Runtime Error

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

☐ Show solution

Question No: 18

Multi Choice Type Question

Report Error

What does the following code result in?

```
1 #include<iostream>
2 using namespace std;
3
4 class Test
5 {
6     public:
7     Test(Test &t) { }
8     Test() { }
9 };
10
11 Test fun()
```

```
12 {  
13     cout << "fun() Called\n";  
14     Test t;  
15     return t;  
16 }
```

☐ fun() Called

☐ Program works fine but no output is displayed

☒ Compiler error **CORRECT**

☐ Runtime error

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

☐ Show solution

Question No: 19

Multi Choice Type Question

Report Error

Is it possible to take the address of a constructor?

☐ Yes

☒ No **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

Question No: 20

Multi Choice Type Question

Report Error

The process of initializing through a copy constructor is known as

☐ copy process



copy registration



copy initialization

CORRECT



initialization process

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Classes and Objects

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_EI Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 0 OS used: Windows Browser used: Chrome

Test Duration: 00:01:13

Test Start Time: May 28, 2022 | 11:18 AM

Test Submit Time: May 28, 2022 | 11:20 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.98 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.23 / 20
Least score: 4.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Fill in the blanks: The ____ access modifier allows access to everything the ____ access modifier does and more.

☐ package-private, protected

☐ protected, public☒ protected, package-private CORRECT☐ private, package-private

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming

Subject: Java Programming **Subject:** Encapsulation

Question No: 2

Multi Choice Type Question

Report Error

Which of the following statements is not true?

☐ An instance of one class may access an instance of another class's attributes if it has a reference to the instance and the attributes are declared public.☒ An instance of one class may access package-private attributes in a parent class, provided the parent class is not in the same package. CORRECT☐ Two instances of the same class may access each other's private attributes.☐ An instance of one class may access an instance of another class's attributes if both classes are located in the same package and marked protected.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming

Subject: Java Programming **Subject:** Encapsulation

Question No: 3

Multi Choice Type Question

Report Error

Which of the following is a true statement about passing data to a method?

- ☐ A change made to a primitive value passed to a method is reflected in the calling method.
- ☒ A change made to the data within an object passed to a method is reflected in the calling method. **CORRECT**
- ☐ Reassigning an object reference passed to a method is reflected in the calling method.
- ☐ A change made to a boolean value passed to a method is reflected in the calling method.

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Hard

Question type: MCQ Single Correct Subject: Programming

Subject: Java Programming Subject: Encapsulation

Question No: 4

Multi Choice Type Question

Report Error

How many lines of code would need to be removed for the following class to compile?

```
1 package work;  
2 public class Week  
3 {  
4     private static final String monday;  
5     String tuesday;  
6     final static wednesday = 3;  
7     final protected int thursday = 4;  
8 }  
9  
10
```

- ☐ One

☐ Two☒ Three **CORRECT**☐ The code will not compile regardless of the number of lines removed.**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming**Subject:** Java Programming **Subject:** Encapsulation**Question No: 5****Multi Choice Type Question****Report Error**

Which statement about a no-argument constructor is true?

☐ The Java compiler will always insert a default no-argument constructor if you do not define a no-argument constructor in your class.☐ In order for a class to call `super()` in one of its constructors, its parent class must explicitly implement a no-argument constructor.☒ If a class extends another class that has only one constructor that takes a value, then the child class must explicitly declare at least one constructor. **CORRECT**☐ A class may contain more than one no-argument constructor.**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming**Subject:** Java Programming **Subject:** Encapsulation**Question No: 6****Multi Choice Type Question****Report Error**

Which of these statement is incorrect?

☐ All object of a class are allotted memory for the all the variables defined in the class

☐ If a function is defined public it can be accessed by object of other class by inheritance

☐ main() method must be made public

☒ All object of a class are allotted memory for the methods defined in the class **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming

Subject: Java Programming **Subject:** Encapsulation

☐ Show solution

Question No: 7

Multi Choice Type Question

Report Error

Which of the following is not a reason to use encapsulation when designing a class?

☐ Promote usability by other developers.

☐ Maintain class data integrity of data elements.

☐ Prevent users from modifying the internal attributes of a class.

☒ Increase concurrency and improve performance. **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming

Subject: Java Programming **Subject:** Encapsulation

Question No: 8

Multi Choice Type Question

[Report Error](#)

Abstract class cannot have a constructor.

☐ True☒ False

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming

Subject: Java Programming Subject: Abstract and Interface

Question No: 9

Multi Choice Type Question

[Report Error](#)

Which of the following is not an attribute common to both abstract classes and interfaces?

☐ They both can contain static variables.☒ They both can contain default methods. CORRECT☐ They both can contain static methods.☐ They both can contain abstract methods.

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming

Subject: Java Programming Subject: Inheritance

Question No: 10

Multi Choice Type Question

[Report Error](#)

Which of the following is used to make an Abstract class?

☒ Making atleast one member function as pure virtual function CORRECT☐

- ☐ Making atleast one member function as virtual function
- ☐ Declaring as Abstract class using virtual keyword
- ☐ Declaring as Abstract class using static keyword

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming

Subject: Java Programming **Subject:** Abstract and Interface

Question No: 11

Multi Choice Type Question

Report Error

Which is also called as abstract class?

- ☐ virtual function
- ☒ pure virtual function **CORRECT**
- ☐ derived class
- ☐ None of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Classes and Objects

☐ Show solution

Question No: 12

Multi Choice Type Question

Report Error

Which feature of OOP is indicated by the following code?

```
1 class student{ int marks; };  
2 class topper:public student{ int age; topper(int age){ this.age=age
```

☐ Inheritance☐ Polymorphism☐ Inheritance and polymorphism☒ Encapsulation and Inheritance **CORRECT****Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Hard**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts**Question No:** 13**Multi Choice Type Question****Report Error**

Find which of the following uses encapsulation?

☐ `void main(){ int a; void fun(int a=10; cout<<a); fun(); }`☐ `class student{ int a; public: int b;;`☒ `class student{int a; public: void disp(){ cout<<a; };` **CORRECT**☐ `struct topper{ char name[10]; public : int marks; }`**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Hard**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts

Question No: 14

Multi Choice Type Question

[Report Error](#)

Find which of the following uses encapsulation?

- ☐ void main(){ int a; void fun(int a=10; cout<<a); fun(); }
- ☐ class student{ int a; public: int b;};
- ☒ class student{int a; public: void disp(){ cout<<a; } }; **CORRECT**
- ☐ struct topper{ char name[10]; public : int marks; }

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts **Blooms Taxonomy:** Analyse

Question No: 15

Multi Choice Type Question

[Report Error](#)

How can Encapsulation be achieved?

- ☒ Using Access Specifiers **CORRECT**
- ☐ Using only private members
- ☐ Using inheritance
- ☐ Using Abstraction

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts **Blooms Taxonomy:** Analyse

Question No: 16

Multi Choice Type Question

[Report Error](#)

Using encapsulation data security is _____

☐ Not ensured☒ Ensured to some extent **CORRECT**☐ Purely ensured☐ Very low

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts **Blooms Taxonomy:** Analyse

Question No: 17**Multi Choice Type Question****Report Error**

Which among the following violates the principle of encapsulation almost always?

☐ Local variables☒ Global variables **CORRECT**☐ Public variables☐ Array variables

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts **Blooms Taxonomy:** Analyse

Question No: 18**Multi Choice Type Question****Report Error**

Hiding the complexity is known as

☐ Abstraction☒

☒ Encapsulation

CORRECT

☐ Data Hiding☐ Composition**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts **Blooms Taxonomy:** Analyse**Question No:** 19**Multi Choice Type Question****Report Error**

Consider the code and select the wrong choice.

```
1 class hero
2 {
3     char name[10];
4     public : void disp()
5     {
6         cout<<name;
7     }
8 };
```

☒ This maintains encapsulation CORRECT☐ This code doesn't maintain encapsulation☐ This code is vulnerable☐ This code gives error**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts **Blooms Taxonomy:** Analyse

Question No: 20

Multi Choice Type Question

[Report Error](#)

While using encapsulation, which among the following is possible?

- ☐ Code modification can be an additional overhead
- ☒ Data member's data type can be changed without changing any other code
- ☐ Data member's type can't be changed, or whole code have to be changed
- ☐ Member functions can be used to change the data type of data members

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts **Blooms Taxonomy:** Analyse

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_IN Course: 2021_25 II_Dat

Attempt 1

IP Address: 49.37.136.26 Tab switches: 2 OS used: Windows Browser used: Chrome

Test Duration: 00:06:52

Test Start Time: May 27, 2022 | 09:10 PM

Test Submit Time: May 27, 2022 | 11:19 PM

Resume Count: 1

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.10 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.32 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 1
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 1
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Which of the following can the derived class inherit?

☐ Data members



Member functions

☒ All of the listed options CORRECT

☐ None of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Inheritance

Question No: 2

Multi Choice Type Question

[Report Error](#)

Which of the following advantages do we lose by using multiple inheritance?

☐ Dynamic binding

☐ Polymorphism

☒ All of the listed options CORRECT

☐ None of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Inheritance

☐ Show solution

Question No: 3

Multi Choice Type Question

[Report Error](#)

How many basic types of inheritance are provided as OOP feature?

☒ 4 CORRECT

☐ 3

☐ 2

☐ 1

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Inheritance

Question No: 4**Multi Choice Type Question****Report Error**

Which among the following best defines single level inheritance?

- ☐ A class inheriting a derived class
- ☒ A class inheriting a base class **CORRECT**
- ☐ A class inheriting a nested class
- ☐ A class which gets inherited by 2 classes

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Inheritance

Question No: 5**Multi Choice Type Question****Report Error**

Which among the following is correct for multiple inheritance?

- ☒ `class student{public: int marks;}; class stream{int total;}; class topper:public student, public stream{ };` **CORRECT**
- ☐ `class student{int marks;}; class stream{ };` `class topper: public student{ };`
- ☐ `class student{int marks;}; class stream:public student{ };`

☐ class student{ }; class stream{ }; class topper{ };

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Inheritance

Question No: 6

Multi Choice Type Question

Report Error

Which is the correct syntax of inheritance?

☐ class derived_classname :
base_classname{ /*define class body*/
};

☐ class base_classname :
derived_classname{ /*define class
body*/ };

☒ class derived_classname :
access base_classname{ **CORRECT**
/*define class body*/ };

☐ class base_classname :access
derived_classname{ /*define class
body*/ };

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Inheritance

Question No: 7

Multi Choice Type Question

Report Error

Which access type data gets derived as private member in derived class?

☒ Private **CORRECT**

☐ Public

☐ Protected

☐ Both protected and private

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Inheritance

Question No: 8

Multi Choice Type Question

Report Error

Members which are not intended to be inherited are declared as

☐ Public members

☐ Protected members

☒ Private members **CORRECT**

☐ Private or Protected members

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Inheritance

Question No: 9

Multi Choice Type Question

Report Error

While inheriting a class, if no access mode is specified, then which among the following is true?

☐ It gets inherited publicly by default

☐ It gets inherited protected by default

☒ It gets inherited privately by default **CORRECT**

☐ It is not possible

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Inheritance

Question No: 10**Multi Choice Type Question****Report Error**

If a derived class object is created, which constructor is called first?

☒ Base class constructor **CORRECT**

☐ Derived class constructor

☐ Depends on how we call the object

☐ Not possible

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Inheritance

Question No: 11**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
class A
{
public:
A(int n )
{
cout << n;
}
};
class B: public A
{
public:
B(int n, double d)
: A(n)
```

```
{
cout << d;
}
};
class C: public B
{
public:
C(int n, double d, char ch)
: B(n, d)
{
cout << ch;
}
};
int main( )
{
C c(5, 4.3, 'R');
return 0;
}
```



54.3R

CORRECT



R4.35



4.3R5



None of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance

Show solution

Question No: 12**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
class Base
{
public:
```



```
int m;  
Base(int n=0)  
: m(n)  
{  
cout << "Base" << endl;  
}  
};  
class Derived: public Base  
{  
public:  
double d;  
Derived(double de = 0.0)  
: d(de)  
{  
cout << "Derived" << endl;  
}  
};  
int main( )  
{  
cout << "Instantiating Base" << endl;  
Base cBase;  
cout << "Instantiating Derived" << endl;  
Derived cDerived;  
return 0;  
}
```

☐ Instantiating Base
Base
Instantiating Derived CORRECT
Base
Derived

☒ Instantiating Base
Instantiating Derived
Base
Derived

☐ Instantiating Base
Base
Instantiating Derived
Base

☐ None of the listed options

Status: Wrong

Mark obtained: 0/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance☐ Show solution**Question No: 13****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include<iostream>
using namespace std;
class X
{
int m;
public:
X() : m(10)
{
}
X(int mm): m(mm)
{
}
int getm( )
{
return m;
}
};
class Y : public X
{
int n;
public:
Y(int nn) : n(nn) {}
int getn( ) { return n; }
};
int main( )
{
Y yobj( 100 );
cout << yobj.getm( ) << " " << yobj.getn( ) << endl;
}
```

☒ 10 100 **CORRECT**☐ 100 10☐ 10 10

☐ 100 100**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance☐ Show solution**Question No: 14****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
class p
{
protected:
int width, height;
public:
void set_values (int a, int b)
{
width = a; height = b;
}
virtual int area (void) = 0;
};
class r: public p
{
public:
int area (void)
{
return (width * height);
}
};
class t: public p
{
public:
int area (void)
{
return (width * height / 2);
}
};
int main ( )
{
```

```
r rect;  
t trgl;  
p * ppoly1 = &rect;  
p * ppoly2 = &trgl;  
ppoly1->set_values (4, 5);  
ppoly2->set_values (4, 5);  
cout << ppoly1 -> area() ;  
cout << ppoly2 -> area();  
return 0;  
}
```

☐ 1020☐ 20☐ 10☒ 2010

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance☐ Show solution**Question No:** 15**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>  
using namespace std;  
class MyInterface  
{  
public:  
virtual void Display() = 0;  
};  
class Class1 : public MyInterface  
{  
public:  
void Display()  
{  
int a = 5;  
cout << a;
```

```
}  
};  
class Class2 : public MyInterface  
{  
public:  
void Display()  
{  
cout <<" 5" << endl;  
}  
};  
int main()  
{  
Class1 obj1;  
obj1.Display();  
Class2 obj2;  
obj2.Display();  
return 0;  
}
```

☐ 5☐ 10☒ 5 5

CORRECT

☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** C++ Programming**Subject:** Inheritance☐ Show solution**Question No:** 16**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>  
using namespace std;  
class BaseClass  
{  
int i;
```

```
public:
void setInt(int n);
int getInt( );
};
class DerivedClass : public BaseClass
{
int j;
public:
void setJ(int n);
int mul( );
};
void BaseClass::setInt(int n)
{
i = n;
}
int BaseClass::getInt( )
{
return i;
}
void DerivedClass::setJ(int n)
{
j = n;
}
int DerivedClass::mul( )
{
return j * getInt( );
}
int main( )
{
DerivedClass ob;
ob.setInt(10);
ob.setJ(4);
cout << ob.mul( );
return 0;
}
```

☐ 10☐ 4☒ 40

CORRECT

☐ None of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance☐ Show solution**Question No:** 17**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
class stu
{
protected:
int rno;
public:
void get_no(int a)
{
rno = a;
}
void put_no(void)
{
}
};
class test:public stu
{
protected:
float part1,part2;
public:
void get_mark(float x, float y)
{
part1 = x;
part2 = y;
}
void put_marks( )
{
}
};
class sports
{
protected:
float score;
public:
void getscore(float s)
{
```

```
score = s;
}
void putscore(void)
{
}
};
class result: public test, public sports
{
float total;
public:
void display(void);
};
void result::display(void)
{
total = part1 + part2 + score;
put_no ();
put_marks( );
putscore( );
cout << "Total Score=" << total << "\n";
}
int main( )
{
result stu;
stu.get_no(123);
stu.get_mark(27.5, 33.0);
stu.getscore(6.0);
stu.display ();
return 0;
}
```



66.5

CORRECT



64.5



62.5



60.5

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance

☐ Show solution**Question No: 18****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
class poly
{
protected:
int width, height;
public:
void set_values(int a, int b)
{
width = a; height = b;
}
};
class Coutput
{
public:
void output(int i);
};
void Coutput::output(int i)
{
cout << i;
}
class rect:public poly, public Coutput
{
public:
int area( )
{
return(width * height);
}
};
class tri:public poly, public Coutput
{
public:
int area( )
{
return(width * height / 2);
}
};
int main( )
{
rect rect;
```

```
tri trgl;  
rect.set_values(3, 4);  
trgl.set_values(4, 5);  
rect.output(rect.area( ));  
trgl.output(trgl.area( ));  
return 0;  
}
```

☐ 1212☒ 1210

CORRECT

☐ 1010☐ none of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Inheritance

☐ Show solution

Question No: 19

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
#include <iostream>  
using namespace std;  
template <class T>  
class A  
{  
public:  
A(int a): x(a) {}  
protected:  
int x;  
};  
template <class T>  
class B: public A<char>  
{  
public:  
B(): A<char>::A(100)  
}
```

```
cout << x * 2 << endl;
}
};
int main( )
{
B<char> test;
return 0;
}
```

☐ 100☒ 200 **CORRECT**☐ error☐ runtime error**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance☐ Show solution**Question No: 20****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <typeinfo>
#include <iostream>
using namespace std;
class shape
{
public:
virtual void myvirtualfunc( ) const {}
};
class mytriangle: public shape
{
public:
virtual void myvirtualfunc( ) const
{
};
};
int main( )
```

```
{
shape shape_instance;
shape &ref_shape = shape_instance;
try
{
mytriangle &ref_mytriangle = dynamic_cast<mytriangle*>(ref_shape);
}
catch (bad_cast)
{
cout << "Caught: bad_cast exception\n";
}
return 0;
}
```

- ☐ Caught standard exception
- ☐ No exception arises
- ☒ Caught: bad_cast exception CORRECT
- ☐ None of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Hard**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Inheritance☐ Show solution

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_P(Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 2 OS used: Windows Browser used: Chrome

Test Duration: 00:03:16

Test Start Time: May 28, 2022 | 11:11 AM

Test Submit Time: May 28, 2022 | 11:15 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.13 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.39 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Which among the following best describes polymorphism?

☒ It is the ability for a message/data to be

CORRECT

processed in more than one

- ☐ It is the ability for a message/data to be processed in only 1 form
- ☐ It is the ability for many messages/data to be processed in one way
- ☐ It is the ability for undefined message/data to be processed in at least one way

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Object Oriented Concepts

Question No: 2

Multi Choice Type Question

Report Error

If same message is passed to objects of several different classes and all of those can respond in a different way, what is this feature called?

- ☐ Inheritance
- ☐ Overloading
- ☒ Polymorphism
- ☐ Overriding

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Object Oriented Concepts

Question No: 3

Multi Choice Type Question

Report Error

Which type of function among the following shows polymorphism?

- ☐ Inline function

☒ Virtual function CORRECT

☐ Undefined functions

☐ Class member functions

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 4

Multi Choice Type Question

Report Error

In case of using abstract class or function overloading, which function is supposed to be called first?

☐ Local function

☒ Function with highest priority in compiler CORRECT

☐ Global function

☐ Function with lowest priority because it might have been halted since long time, because of low priority

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Hard

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 5

Multi Choice Type Question

Report Error

Which among the following can't be used for polymorphism?

☒ Static member functions CORRECT

☐ Member functions overloading

☐ Predefined operator overloading☐ Constructor overloading**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts**Question No: 6****Multi Choice Type Question****Report Error**

Which among the following can show polymorphism?

☐ Overloading ||☐ Overloading +=☒ Overloading << **CORRECT**☐ Overloading &&**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Object Oriented Concepts**Question No: 7****Multi Choice Type Question****Report Error**

If 2 classes derive one base class and redefine a function of base class, also overload some operators inside class body. Among these two things of function and operator overloading, where is polymorphism used?

☐ Function overloading only☐ Operator overloading only☐ Both function and operator overloading

Both of these are using polymorphism

- ☒ Either function overloading or operator overloading because polymorphism can be applied only once in a program **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Hard

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 8

Multi Choice Type Question

Report Error

What is the other name of compile-time polymorphism?

- ☒ Static polymorphism **CORRECT**

☐ Dynamic polymorphism

☐ Executing polymorphism

☐ Non-executing polymorphism

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 9

Multi Choice Type Question

Report Error

What is the other name of run-time polymorphism?

☐ Static polymorphism

☒ Dynamic polymorphism **CORRECT**

☐ Executing polymorphism

☐ Non-executing polymorphism

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts

Question No: 10

Multi Choice Type Question

Report Error

Which of the following is correct about static polymorphism?

☒ In static polymorphism, the conflict between the function call is resolved during the compile time **CORRECT**

☐ In static polymorphism, the conflict between the function call is resolved during the run time

☐ In static polymorphism, the conflict between the function call is never resolved during the execution of a program

☐ In static polymorphism, the conflict between the function call is resolved only if it required

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts

Question No: 11

Multi Choice Type Question

Report Error

Which of the following is correct about dynamic polymorphism?

☐ In dynamic polymorphism, the conflict between the function call is resolved during the compile time

☒ In dynamic polymorphism, the conflict between the function call is resolved during the run time

CORRECT

- ☐ In dynamic polymorphism, the conflict between the function call is never resolved during the execution of the program
- ☐ In dynamic polymorphism, the conflict between the function call is resolved at the beginning of the program

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 12

Multi Choice Type Question

Report Error

Which problem may arise if we use abstract class functions for polymorphism?

- ☐ All classes are converted as abstract class
- ☐ Derived class must be of abstract type
- ☒ All the derived classes must implement the undefined functions
- ☐ Derived classes can't redefine the function

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 13

Multi Choice Type Question

Report Error

Which among the following is not true for polymorphism?

- ☐ It is feature of OOP
- ☐ Ease in readability of program
- ☐ Helps in redefining the same functionality

☒ Increases overhead of function definition always **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts

Question No: 14

Multi Choice Type Question

Report Error

Which of the following correctly describes overloading of functions?

- ☐ Virtual polymorphism
- ☐ Transient polymorphism

☒ **CORRECT**

- ☐ Pseudo polymorphism

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts

Question No: 15

Multi Choice Type Question

Report Error

Which class/set of classes can illustrate polymorphism in the following code?

```
1 abstract class student
2 {
3     public : int marks;
4     calc_grade();
5 }
```

```
6 class topper:public student
7 {
8     public : calc_grade()
9     {
10         return 10;
11     }
12 };
13 class average:public student
14 {
15     public : calc_grade()
16     {
```

- ☐ Only class student can show polymorphism
- ☐ Only class student and topper together can show polymorphism
- ☒ All class student, topper and average together can show **CORRECT** polymorphism
- ☐ Class failed should also inherit class student for this code to work for polymorphism

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Object Oriented Concepts

Question No: 16

Multi Choice Type Question

Report Error

What is output of the following program?

```
1 class student
2 {
3     public : int marks;
4     void disp()
5     {
6         cout<<"its base class"
7     };
8     class topper:public student
9     {
10         public :
11         void disp()
12         {
13             cout<<"Its derived class";
14         }
```

```
15     }  
16 void main() { student s; topper t;
```

☒ Its base classIts derived class CORRECT

☐ Its base class Its derived class

☐ Its derived classIts base class

☐ Its derived class Its base class

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Hard

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Object Oriented Concepts

Question No: 17

Multi Choice Type Question

Report Error

Find the output of the following program.

```
1 class education  
2 {  
3     char name[10];  
4     public : disp()  
5     {  
6         cout<<"Its education system";  
7     }  
8     class school:public education  
9     {  
10        public: void dsip()  
11        {  
12            cout<<"Its school education system";  
13        }  
14    };  
15    void main()  
16    {
```

☒ Its school education system CORRECT

☐ Its education system

☐ Its school education systemIts education system

- ☐ Its education system
Its school education system

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts

Question No: 18**Multi Choice Type Question****Report Error**

Which of the following is a mechanism of static polymorphism?

- ☐ Templates
- ☐ Function overloading
- ☐ Operator overloading

**CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Object Oriented Concepts

Question No: 19**Multi Choice Type Question****Report Error**

Which of the following statements is NOT valid about operator overloading?

- ☐ Only existing operators can be overloaded.
- ☐ Overloaded operator must have at least one operand of its class type.
- ☐ The overloaded operators follow the syntax rules of the original operator.

**None of the listed options****CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Object Oriented Concepts

Question No: 20

Multi Choice Type Question

Report Error

What will happen when the function call operator is overloaded?

☐ It will not modify the functions.

☐ It will modify the functions.

☐ It will modify the object.

☒ It will modify the operator to be interpreted. **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Object Oriented Concepts

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_E Course: 2021_25 II_Dat

Attempt 1

IP Address: 2409:4072:6e91:c98:2561:29d:b4c4:b578 Tab switches: 1 OS used: Windows

Browser used: Chrome

Test Duration: 00:03:59

Test Start Time: May 31, 2022 | 12:26 AM

Test Submit Time: May 31, 2022 | 12:30 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.33 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.61 / 20
Least score: 5.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

What will happen when the exception is not caught in the program?

☐ error

☒ CORRECT

- ☐ program will execute
- ☐ block of that code will not execute
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

Question No: 2**Multi Choice Type Question****Report Error**

Which key word is used to check exception in the block of code?

- ☐ catch
- ☐ throw
- ☒ try **CORRECT**
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 3**Multi Choice Type Question****Report Error**

What will happen when the handler is not found for exception?

- ☒ Calls the standard library function terminate() **CORRECT**
- ☐ raise an error

☐ executes the remaining block

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Exception Handling

Question No: 4

Multi Choice Type Question

Report Error

Which keyword is used to handle the exception?

☐ try

☐ throw

☒ catch **CORRECT**

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Exception Handling

☐ Show solution

Question No: 5

Multi Choice Type Question

Report Error

Which is used to throw a exception?

☒ throw **CORRECT**

☐ try

☐ catch

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

Question No: 6**Multi Choice Type Question****Report Error**

What is the use of the 'finally' keyword?

☐ It used to execute at the starting of the program

☒ It will be executed at the end of the program even if the exception arised. **CORRECT**

☐ Both A & B

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 7**Multi Choice Type Question****Report Error**

Which block should be placed after try block?

☐ catch

☐ throw

☒ a or b **CORRECT**

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

Question No: 8**Multi Choice Type Question****Report Error**

Where do the exceptions use?

- ☐ To preserve the program
- ☐ Exceptions are used when postconditions of a function cannot be satisfied.
- ☒ Exceptions are used when postconditions of a function can be satisfied. **CORRECT**
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

Question No: 9**Multi Choice Type Question****Report Error**

Where does the exception handle?

- ☐ inside the program
- ☒ outside the regular code **CORRECT**
- ☐ Both A & B
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

Question No: 10**Multi Choice Type Question****Report Error**

Which is used to check the error in the block?

☒ try **CORRECT**

☐ throw

☐ catch

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 11**Multi Choice Type Question****Report Error**

What kind of exceptions are available in c++?

☐ handled

☒ unhandled **CORRECT**

☐ static

☐ dynamic

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Exception Handling**Question No:** 12**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
double division(int a, int b)
{
    if (b == 0)
    {
        throw "Division by zero condition!";
    }
    return (a / b);
}
int main ()
{
    int x = 50;
    int y = 0;
    double z = 0;
    try
    {
        z = division(x, y);
        cout << z << endl;
    }
    catch (const msg)
    {
        cerr << msg << endl;
    }
    return 0;
}
```

☐ 50☐ 0☐ Division by zero condition☒ Error

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 13

Multi Choice Type Question

Report Error

Which alternative can replace the throw statement?

☐ for

☐ break

☒ return **CORRECT**

☐ exit

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 14

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <stdexcept>
#include <limits>
#include <iostream>
using namespace std;
void MyFunc(char c)
{
    if (c < numeric_limits<char>::max( ))
        return invalid_argument;
}
int main( )
{
    try
    {
        MyFunc(256);
    }
}
```



```
catch(invalid_argument& e)
{
cerr << e.what( ) << endl;
return -1;
}
return 0;
}
```

☐ 256☐ invalid argument☒ error

CORRECT

☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** C++ Programming**Subject:** Exception Handling☐ Show solution**Question No:** 15**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
#include <exception>
using namespace std;
class myexc: public exception
{
virtual const char* what( ) const throw( )
{
return "My exception";
}
} myex;
int main ( )
{
try
{
throw myex;
```

```
}  
catch (exception& e)  
{  
cout << e.what() << endl;  
}  
return 0;  
}
```

☐ My☒ My exception **CORRECT**☐ No exception☐ None of the listed options**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Exception Handling☐ Show solution**Question No: 16****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>  
#include <exception>  
using namespace std;  
int main ()  
{  
try  
{  
int* myarray = new int[1000];  
cout << "allocated";  
}  
catch (exception& e)  
{  
cout << "Standard exception: " << e.what() << endl;  
}  
return 0;  
}
```



allocated

CORRECT



Standard exception



Depends on the memory



error

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Exception Handling

Show solution

Question No: 17**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
int main ( )
{
    try
    {
        throw 20;
    }
    catch (int e)
    {
        cout << "An exception occurred " << e << endl;
    }
    return 0;
}
```



20



An exception occurred



error



An exception occurred 20

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Exception Handling

Show solution

Question No: 18**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
void Funct();
int main()
{
    try {
        Funct();
    }
    catch(double) {
        cerr << "caught a double type..." << endl;
    }
    return 0;
}
void Funct()
{
    throw 3;
}
```



caught a double type



compile time error

abnormal program
termination

CORRECT



None of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 19

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
using namespace std;
int main()
{
double a = 10, b = 5, res;
char Operator = '/';
try
{
if (b == 0)
throw "Division by zero not allowed";
res = a / b;
cout << a << " / " << b << " = " << res;
}
catch(const char* Str)
{
cout << "\n Bad Operator: " << Str;
}
return 0;
}
```

☐ 10

☐ 2

☐ Bad Operator

☒ 10 / 5 = 2

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Exception Handling

☐ Show solution

Question No: 20

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
#include <iostream>
using namespace std;
int main()
{
    try
    {
        throw 1;
    }
    catch (int a)
    {
        cout << "exception number: " << a << endl;
        return 0;
    }
    cout << "No exception " << endl;
    return 0;
}
```

☐ No exception☐ exception number☒ exception number: 1 **CORRECT**☐ None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** C++ Programming**Subject:** Exception Handling☐ Show solution

Result & Analysis

Student: Gm_Abhishek Email id: 727821tuit004 Test: IRC_CPP_MCQ_S1 Course: 2021_25 II_Dat

Attempt 1

IP Address: 2409:4072:8e84:6e52:9ed:970d:6086:2b21 Tab switches: 2 OS used: Windows

Browser used: Chrome

Test Duration: 00:03:37

Test Start Time: Jun 2, 2022 | 06:32 AM

Test Submit Time: Jun 2, 2022 | 06:36 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.30 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.58 / 20
Least score: 5.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

How many sets of requirements are needed in designing a container?

☐ 1

☐ 2☒ 3

CORRECT

☐ 4**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** STL☐ Show solution**Question No:** 2**Multi Choice Type Question****Report Error**

Which container provides random access iterators?

☐ (A) vector☐ (B) deque☐ (C) sort☒ (D) Both A & B

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** STL**Question No:** 3**Multi Choice Type Question****Report Error**

How the member function in the container can be accessed?

☒ (A) Iterator

CORRECT

☐ (B) Indirect☐

☐ (C) Both A & B

☐ (D) None of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: STL

Blooms Taxonomy: Analyse

☐ Show solution

Question No: 4

Multi Choice Type Question

Report Error

Which of the following type should the container define?

☒ Iterator type CORRECT

☐ Vector type

☐ Storage type

☐ None of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: STL

Blooms Taxonomy: Analyse

☐ Show solution

Question No: 5

Multi Choice Type Question

Report Error

What do vectors represent?

☐ Static arrays

☒ Dynamic arrays CORRECT

☐ Stack

☐

Queue

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution**Question No: 6****Multi Choice Type Question****Report Error**

How many vector container properties are there in c++?

☐ 1☐ 2☒ 3 **CORRECT**☐ 4

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution**Question No: 7****Multi Choice Type Question****Report Error**

How many items are there in sequence container?

☐ 1☐ 2☒ 5 **CORRECT**☐ 4

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution

Question No: 8

Multi Choice Type Question

Report Error

Which of the following will return the new element at the end of container?

☐ front

☒ back **CORRECT**

☐ push_back

☐ pop_back

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

Question No: 9

Multi Choice Type Question

Report Error

How the list containers are implemented?

☒ (A) Using Double linked list **CORRECT**

☐ (B) Using Single linked list

☐ (C) Both A & B

☐ (D) None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution

Question No: 10

Multi Choice Type Question

[Report Error](#)

Which are presented in the container adaptors?

☐ stack☐ queue☐ priority_queue☒ All of the listed options **CORRECT****Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** STL☐ Show solution

Question No: 11

Multi Choice Type Question

[Report Error](#)

By using which of the following the elements in the associate container can be efficiently accessed?

☒ (A) Key **CORRECT**☐ (B) Position☐ (C) Both A & B☐ (D) None of the listed options**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** STL☐ Show solution

Question No: 12

Multi Choice Type Question

[Report Error](#)

How many items are presented in the associate container?

☐ 2☐ 3☐ 4☒ 5

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: STL

☐ Show solution

Question No: 13

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
#include <iostream>
#include <algorithm>
#include <vector>
using namespace std;
int main ( )
{
    vector<int> first (5, 10);
    vector<int> second (5, 33);
    vector<int>::iterator it;
    swap_ranges(first.begin( ) + 1, first.end( ) - 1, second.begin( ));
    cout << " first contains:";
    for (it = first.begin( ); it != first.end( ); ++it)
        cout << " " << *it;
    cout << "\nsecond contains:";
    for (it = second.begin( ); it != second.end( ); ++it)
        cout << " " << *it;
    return 0;
}
```

☒ (A) first contains: 10 33 33 33
10
second contains: 10 10 10 33
33 **CORRECT**

☐ (B) first contains: 10 33 33 33 10
second contains: 10 10 10 33 10

☐ (C) Both A & B

☐ (D) None of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: STL

☐ Show solution

Question No: 14

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
#include <set>
using namespace std;
int main ( )
{
    set<int> myset;
    myset.insert(20);
    myset.insert(30);
    myset.insert(10);
    while (!myset.empty( ))
    {
        cout << ' ' << *myset.begin( );
        myset.erase(myset.begin( ));
    }
    cout << '\n';
    return 0;
}
```

☐ 10

☐ 20☐ 30☒ All of the listed options **CORRECT****Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** STL☐ Show solution**Question No:** 15**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
#include <set>
using namespace std;
int main ()
{
    multiset<int> mymultiset;
    for (int i = 0; i < 5; i++) mymultiset.insert(i);
    multiset<int> :: key_compare mycomp = mymultiset.key_comp( );
    int highest = *mymultiset.rbegin( );
    multiset<int> :: iterator it = mymultiset.begin( );
    do
    {
        cout << ' ' << *it;
    } while (mycomp(*it++, highest));
    return 0;
}
```

☐ 12345☒ 01234 **CORRECT**☐ 1234☐ 0123

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution

Question No: 16 **Multi Choice Type Question**

Report Error

To what type of object does the container can be instantiated?

☐ int

☐ float

☐ double

☒ Any type of object **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

Question No: 17 **Multi Choice Type Question**

Report Error

What is the output of this program?

```
#include <iostream>
#include <vector>
using namespace std;
int main ( )
{
    unsigned int i;
    vector<int> first;
    vector<int> second (4, 100);
    vector<int> third (second.begin( ), second.end( ));
    vector<int> fourth (third);
    int myints[] = {16, 2, 77, 29};
    vector<int> fifth (myints, myints + sizeof(myints) / sizeof(int) );
    for (vector<int> :: iterator it = fifth.begin( ); it != fifth.end( ); ++it)
```



```
cout << ' ' << *it;
return 0;
}
```

☐ 16☐ 16 2☐ 16 2 77☒ 16 2 77 29

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: STL

☐ Show solution

Question No: 18

Multi Choice Type Question

[Report Error](#)

What is the output of this program?

```
#include <iostream>
#include <vector>
int main ( )
{
vector<int> myvector;
int sum (0);
myvector.push_back (100);
myvector.push_back (200);
myvector.push_back (300);
while (!myvector.empty( ))
{
sum += myvector.back( );
myvector.pop_back( );
}
cout << sum << '\n';
return 0;
}
```

☐ 500

600

CORRECT



700



Error

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** STL☐ Show solution**Question No:** 19**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
#include <vector>
using namespace std;
int main ( )
{
vector<int> a (3, 0);
vector<int> b (5, 0);
b = a;
a = vector<int>();
cout << "Size of a " << int(a.size( )) << '\n';
cout << "Size of b " << int(b.size( )) << '\n';
return 0;
}
```

Size of a 0
Size of b 3

CORRECT

Size of a 3
Size of b 5

Error



None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution

Question No: 20

Multi Choice Type Question

Report Error

What is the output of this program?

```
#include <iostream>
#include <vector>
using namespace std;
int main ( )
{
vector<int> first;
first.assign (7,100);
vector<int>::iterator it;
it=first.begin( )+1;
int myints[ ] = {1776,7,4};
cout << int (first.size( )) << '\n';
return 0;
}
```

☐ 10

☐ 9

☐ 8

☒ 7

CORRECT

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: STL

☐ Show solution

Result & Analysis

Student: GUGAN S Email id: 727821tuit02@skct.ac.in Test: IRC_CPP_MCQ_Test Course: 2021_25 II_Dat

Attempt 1

IP Address: 2409:4072:6e83:8a28:b70c:f697:c15a:536b Tab switches: 7 OS used: Android
Browser used: Chrome

Test Duration: 00:01:20

Test Start Time: Jun 3, 2022 | 08:02 AM

Test Submit Time: Jun 3, 2022 | 08:03 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.25 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.51 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

What is a template?



A template is a formula for
creating a generic class

CORRECT

- ☐ A template is used to manipulate the class
- ☐ A template is used for creating the attributes
- ☐ none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Templates

Question No: 2**Multi Choice Type Question****Report Error**

Pick out the correct statement about string template

- ☐ It is used to replace a string.
- ☒ It is used to replace a string with another string at runtime. **CORRECT**
- ☐ It is used to delete a string.
- ☐ none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Templates

☐ Show solution**Question No: 3****Multi Choice Type Question****Report Error**

What may be the name of the parameter that the template should take?

- ☒ same as template **CORRECT**

- ☐ same as class
- ☐ same as function
- ☐ none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Templates

Question No: 4

Multi Choice Type Question

Report Error

What is a function template?

- ☒ (A) creating a function without having to specify the exact type. **CORRECT**
- ☐ (B) creating a function with having a exact type.
- ☐ (C) both A & B
- ☐ (D) none of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Templates

Question No: 5

Multi Choice Type Question

Report Error

Which is used to describe the function using placeholder types?

- ☐ template parameters
- ☒ template type parameters **CORRECT**

☐ template type☐ none of the listed options**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Templates☐ Show solution**Question No:** 6**Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
template
type Max(type Var1, type Var2)
{
return Var1 > Var2 ? Var1:Var2;
}
int main( )
{
int p;
p = Max(100, 200);
cout << p << endl;
return 0;
}
```

☐ 100☒ 200 **CORRECT**☐ 300☐ 100200**Status:** Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Templates☐ Show solution**Question No: 7****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
template
inline T square(T x)
{
    T result;
    result = x * x;
    return result;
};
int main( )
{
    int i, ii;
    float x, xx;
    double y, yy;
    i = 2;
    x = 2.2;
    y = 2.2;
    ii = square(i);
    cout << i << " " << ii << endl;
    yy = square(y);
    cout << y << " " << yy << endl;
}
```

2 4
2.2 4.84**CORRECT**

2 4



error



runtime error

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming

Subject: Templates☐ Show solution**Question No: 8****Multi Choice Type Question****Report Error**

What is the output of this program?

```
#include <iostream>
using namespace std;
template
void loopIt(T x)
{
    T val[count];
    for (int ii=0; ii < count; ii++)
    {
        val[ii] = x++;
        cout << val[ii] << endl;
    }
};
int main( )
{
    float xx = 2.1;
    loopIt(xx);
}
```

☐ 2.1☐ 3.1☐ 3.2☒ 2.1

3.1

4.1

CORRECT**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** C++ Programming**Subject:** Templates☐ Show solution

Question No: 9

Multi Choice Type Question

[Report Error](#)

Which is dependant on template parameter?

☒ base class **CORRECT**

☐ abstract class

☐ method

☐ None of the listed options

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming
Subject: Templates

Question No: 10

Multi Choice Type Question

[Report Error](#)

Which is an instantiation of the basic_string class template?

☐ Character

☒ String class **CORRECT**

☐ Memory

☐ None of the listed options

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming
Subject: Templates

☐ Show solution

Question No: 11

Multi Choice Type Question

[Report Error](#)

What is lambda expression in C++?

☒ A technique of C++ that allows us to write inline functions without a name **CORRECT**

☐ A technique of C++ that allows us to write overloaded functions

☐ A technique of C++ that allows us to write functions that are called more than once

☐ A technique of C++ that allows us to write functions without parameters

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Lambda Expression **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 12

Multi Choice Type Question

Report Error

What is the syntax of defining lambda expressions?

☒ [capture clause](parameters)
-> return_type { body of the function } **CORRECT**

☐ [parameters](capture clause) ->
return_type { body of the function }

☐ [parameters:capture clause]() ->
return_type { body of the function }

☐ [capture clause:parameters]() ->
return_type { body of the function }

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming
Subject: Lambda Expression **Blooms Taxonomy:** Analyse

☐ Show solution

Question No: 13

Multi Choice Type Question

[Report Error](#)

What is the correct statement about lambda expressions?

☒ The return type of lambda expression can be neglected **CORRECT** in some cases

☐ The return type of lambda expression must be specified in all cases

☐ Lambda expression should be very large functions

☐ Lambda expression is also available in C

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Lambda Expression Blooms Taxonomy: Analyse

☐ Show solution

Question No: 14

Multi Choice Type Question

[Report Error](#)

Which of the following operator is used to capture all the external variables by reference?

☒ & **CORRECT**

☐ =

☐ *

☐ &&

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Lambda Expression Blooms Taxonomy: Analyse

☐ Show solution

Question No: 15

Multi Choice Type Question

[Report Error](#)

Which is the correct syntax for capturing a variable 'X' by reference and other variable 'Y' by value in the lambda expression?

☒ [&X, Y] **CORRECT**☐ [X, &y]☐ [X, Y]☐ [&x, &Y]**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Lambda Expression **Blooms Taxonomy:** Analyse☐ Show solution

Question No: 16

Multi Choice Type Question

[Report Error](#)

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

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int x = 5;
6     auto check = []() -> bool
7     {
8         if(x == 0)
9             return false;
10        else
11            return true;
12    };
13    cout<<check()<<endl;
14    return 0;
15 }
```

☐ 1☐

0



Error

CORRECT



Segmentation fault

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Lambda Expression Blooms Taxonomy: Analyse



Show solution

Question No: 17

Multi Choice Type Question

Report Error

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

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 5;
6     auto check = [](int x)
7     {
8         if(x == 0)
9             return false;
10        else
11            return true;
12    };
13    cout<<check(a)<<endl;
14    return 0;
15 }
```



0



1

CORRECT



Error



Segmentation fault

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Lambda Expression **Blooms Taxonomy:** Analyse☐ Show solution**Question No: 18****Multi Choice Type Question****Report Error**

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

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 5;
6     auto check = [=]()
7     {
8         a = 10;
9     };
10    check();
11    cout<<"Value of a: "<<a<<endl;
12    return 0;
13 }
```

☐ Value of a: 5☐ Value of a: 10☒ Error **CORRECT**☐ Segmentation fault**Status:** Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Lambda Expression **Blooms Taxonomy:** Analyse☐ Show solution**Question No: 19****Multi Choice Type Question****Report Error**

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

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 5;
```

```
6 auto check = [&]()
7 {
8     a = 10;
9 };
10 check();
11 cout<<"Value of a: "<<a<<endl;
12 return 0;
13 }
```

☐ Value of a: 5

☐ Value of a: 10

☒ Error CORRECT

☐ Segmentation fault

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: C++ Programming

Subject: Lambda Expression Blooms Taxonomy: Analyse

☐ Show solution

Question No: 20

Multi Choice Type Question

Report Error

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

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     int a = 5;
6     int b = 5;
7     auto check = [&a]()
8     {
9         a = 10;
10        b = 10;
11    }
12    check();
13    cout<<"Value of a: "<<a<<endl;
14    cout<<"Value of b: "<<b<<endl;
15    return 0;
16 }
```




Value of a: 5



Value of a: 10



Error

CORRECT



Segmentation fault

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** C++ Programming**Subject:** Lambda Expression **Blooms Taxonomy:** Analyse

Show solution

Result & Analysis

Student: GUGAN S Email id: 727821tuit02@skct.ac.in Test: IRC_DSA THROUG Course: 2021_25 II_Dat

Attempt 1

IP Address: 2409:4072:6e83:8a28:b70c:f697:c15a:536b Tab switches: 12 OS used: Android
Browser used: Chrome

Test Duration: 00:01:32

Test Start Time: Jun 3, 2022 | 08:04 AM

Test Submit Time: Jun 3, 2022 | 08:07 AM

Resume Count: 1

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.95 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.43 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Consider an implementation of unsorted singly linked list. Suppose it has its representation with a head pointer only.

Given the representation, which of the following operation can be implemented in $O(1)$ time?

- i) Insertion at the front of the linked list
- ii) Insertion at the end of the linked list
- iii) Deletion of the front node of the linked list
- iv) Deletion of the last node of the linked list

☐ I and II

☒ I and III **CORRECT**

☐ I, II and III

☐ I, II and IV

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 2

Multi Choice Type Question

Report Error

Consider a small circular linked list. How to detect the presence of cycles in this list effectively?

☐ Keep one node as head and traverse another temp node till the end to check if its 'next' points to head

☒ Have fast and slow pointers with the fast pointer advancing two nodes at a time and slow pointer advancing by one node at a time **CORRECT**

☐ Cannot determine, you have to pre-define if the list contains cycles

- ☐ Circular linked list itself represents a cycle. So no new cycles cannot be generated

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 3 **Multi Choice Type Question**

Report Error

Which of the following is not true about a circular linked list?

- ☐ Every node has a successor
- ☐ Time complexity of inserting a new node at the head of the list is $O(1)$
- ☐ Time complexity for deleting the last node is $O(n)$
- ☒ We can traverse the whole circular linked list by starting from any point **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 4 **Multi Choice Type Question**

Report Error

In a circular linked list organization, insertion of a record involves modification of

- ☐ One pointer.
- ☒ Two pointers. **CORRECT**

☐ Multiple pointers.

☐ No pointer.

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

Subject: Singly linked List

☐ Show solution

Question No: 5

Multi Choice Type Question

Report Error

Which of the following statements is true?

☒ Elements of a linked-list can be accessed only sequentially. **CORRECT**

☐ Array elements can be accessed and modified (elements can be added or removed) only at the ends of the array while any element of stacks can be accessed/modified randomly through their indices.

☐ An array can have elements of different data types.

☐ Arrays is a dynamic data structure whose size can be changed while stacks are static data structures whose sizes are fixed.

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

Subject: Singly linked List

Question No: 6

Multi Choice Type Question

Report Error

Given pointer to a node X in a singly linked list. Only one pointer is given, pointer to head node is not given, can we delete the node X from given linked list?

☒ Possible if X is not the last node. Copy the data of next of X to X. Delete next of X. **CORRECT**

☐ Possible if size of linked list is even

☐ Possible if size of linked list is odd

☐ Possible if X is not first node. Copy the data of next of X to X. Delete next of X.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 7

Multi Choice Type Question

Report Error

What is a memory efficient double linked list?

☒ Each node has only one pointer to traverse the list back and forth **CORRECT**

☐ The list has breakpoints for faster traversal

☐ An auxiliary singly linked list acts as a helper list to traverse through the doubly linked list

☐ None of listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 8

Multi Choice Type Question

Report Error

Assume ILAST points to the last node in a singly linked list whose top (i.e. front) is TOP1. Assume TOP2 points to the first node in another singly linked list. Which statement will append list2 to the end of list1.

☐ TOP2 := ILAST;

☐ ILAST := TOP2;

☐ LINK[TOP2] := ILAST;

☒ LINK[ILAST] := TOP2; **CORRECT**

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 9

Multi Choice Type Question

Report Error

A doubly linked list is declared as provided in the code snippet. Where Fwd and Bwd represent forward and backward link to the adjacent elements of the list. Which of the following segments of code deletes the node pointed to by X from the doubly linked list, if it is assumed that X points to neither the first nor the last node list?

```
1 struct Node {  
2   int value;  
3   struct Node*Fwd;  
4   struct Node*Bwd;  
5 };
```

☒ X->Bwd->Fwd = X->Fwd;
X->Fwd->Bwd = X->Bwd; **CORRECT**

☐ X->Bwd.Fwd = X->Fwd;
X->Fwd->Bwd = X->Bwd;

☐ X.Bwd->Fwd = X.Bwd;
X->Fwd.Bwd = X.Bwd;

☐ X->Bwd->Fwd = X->Bwd;
X->Fwd->Bwd = X->Fwd;

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 10

Multi Choice Type Question

Report Error

Consider the C code fragment given below.

Assuming that m and n point to valid NULL-terminated linked lists, invocation of join will

```
1  typedef struct node  {  
2      int data;  
3      node* next;  
4  }   node;  
5  
6  void join(node* m, node* n)  {  
7      node*  p = n;  
8      while(p->next !=NULL)  {  
9          p = p->next;  
10     }  
11     p->next=m;  
12 }
```

☐ append list m to the end of list n for all inputs.

☒ either cause a null pointer dereference or append list m to the end of list n. **CORRECT**

☐ cause a null pointer dereference for all inputs.

☐ append list n to the end of list m for all inputs.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

☐ Show solution

Question No: 11

Multi Choice Type Question

Report Error

Complete the missing statements in the following program snippet to merge two sorted linked lists:

```

1 Node* merge(Node* h1, Node* h2)
2 {
3     if (!h1)
4         return h2;
5     if (!h2)
6         return h1;
7     if (h1->data < h2->data) {
8         h1->next = _____ (A)
9         return h1;
10    }
11    else {
12        h2->next = _____ (B)
13        return h2;
14    }
15 }
```

☒ (A) merge(h1->next, h2); (B) merge(h1, h2->next); **CORRECT**

☐ (A) merge(h2, h1->next); (B) merge(h1, h2->next);

☐ (A) merge(h1->next, h2); (B) merge(h2->next, h1);

☐

(A) merge(h2->next, h1); (B) merge(h2, h1->next);

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Singly linked List

Question No: 12

Multi Choice Type Question

Report Error

Consider the following function that takes reference to head of a Doubly Linked List as parameter. Assume that a node of doubly linked list has previous pointer as prev and next pointer as next.

Assume that reference of head of following doubly linked list is passed to above function
1 2 3 4 5 6.

What should be the modified linked list after the function call?

```
1 void fun(struct node **head_ref)
2 {
3     struct node *temp = NULL;
4     struct node *current = *head_ref;
5
6     while (current != NULL)
7     {
8         temp = current->prev;
9         current->prev = current->next;
10        current->next = temp;
11        current = current->prev;
12    }
13
14    if(temp != NULL )
15        *head_ref = temp->prev;
16 }
```

☐ 2 1 4 3 6 5.

☐ 5 4 3 2 1 6.

☒ 6 5 4 3 2 1.

CORRECT

☐ 6 5 4 3 1 2

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Singly linked List**Question No: 13****Multi Choice Type Question****Report Error**

What is the output of following function for start pointing to first node of following linked list?

1->2->3->4->5->6

```

1 void fun(struct node* start)
2 {
3     if(start == NULL)
4         return;
5     printf("%d ", start->data);
6     if(start->next != NULL )
7         fun(start->next->next);
8     printf("%d ", start->data);
9 }
10

```

☐ 1 4 6 6 4 1

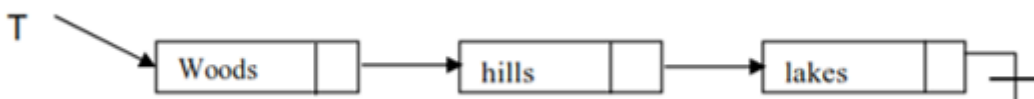
☐ 1 3 5 1 3 5

☐ 1 2 3 5

☒ 1 3 5 5 3 1

CORRECT**Status: Correct****Mark obtained: 1/1****Hints used: 0****Level: Medium****Question type: MCQ Single Correct Subject: Programming Subject: Data Structures****Subject: Singly linked List****Question No: 14****Multi Choice Type Question****Report Error**

T is a singly linked list as shown below. What does the following pseudocode do to the list?



```

1 T = LINK(T);
2 P = LINK( LINK(T));
3 GETNODE(X);
4 DATA(X) = "meadow";
5 LINK(X) = P;
6 LINK( LINK(T)) = X;

```

☐ Insertion at front

☒ Insertion at end **CORRECT**

☐ Insertion in middle

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

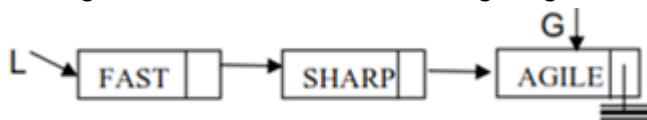
Subject: Singly linked List

Question No: 15

Multi Choice Type Question

Report Error

For the given linked list, the following fragment inserts "QUICK" as



```

1 GETNODE(x);
2 DATA(X) = "QUICK";
3 G=L;
4 L=X;
5 LINK (L) = G;
6

```

☒ First node of the list **CORRECT**

☐ Last node of the list

☐ In between FAST and SHARP

☐ In between SHARP and AGILE

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 16

Multi Choice Type Question

Report Error

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

☒ Deleting a node whose location in given **CORRECT**

☐ Searching of an unsorted list for a given item

☐ Inverting a node after the node with given location

☐ Traversing a list to process each node

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 17

Multi Choice Type Question

Report Error

In a circular linked list

- ☐ Components are all linked together in some sequential manner.
- ☒ There is no beginning and no end. **CORRECT**
- ☐ Components are arranged hierarchically.
- ☐ Forward and backward traversal within the list is permitted.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 18

Multi Choice Type Question

Report Error

In linked list each node contain minimum of two fields. One field is data field to store the data second field is?

- ☐ Pointer to character
- ☐ Pointer to integer
- ☒ Pointer to node **CORRECT**
- ☐ Node

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Question No: 19

Multi Choice Type Question

[Report Error](#)

Consider the following definition in c programming language
Which of the following c code is used to create new node?

```
1 struct node
2 {
3     int data;
4     struct node * next;
5 }
6 typedef struct node NODE;
7 NODE *ptr;
8
```

☒ ptr=(NODE*)malloc(sizeof(NODE)); CORRECT

☐ ptr=(NODE*)malloc(NODE);

☐ ptr=(NODE*)malloc(sizeof(NODE*));

☐ ptr=(NODE)malloc(sizeof(NODE));

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Singly linked List

Question No: 20

Multi Choice Type Question

[Report Error](#)

What is the functionality of the following code? Select the most appropriate.

```
1 public void function(int data)
2 {
3     int flag =0;
4     if(head !=null)
5     {
6         Node temp = head.getNext();
7         while((temp!=head) && ((temp.getNext() == data)))
```

```
7      while((temp!=head) && !(temp.getItem() == data)){
8          {
9              temp =temp.getNext();
10             flag =1;
11             break;
12         }
13     }
14     if(flag)
15         System.out.println("success");
16     else
```

- ☐ Print success if a particular element is not found.
- ☒ Print fail if a particular element is not found. **CORRECT**
- ☐ Print success if a particular element is equal to 1.
- ☐ print fail if the list is empty.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Singly linked List

Result & Analysis

Student: GUGAN S Email id: 727821tuit02@skct.ac.in Test: IRC_DSA THROUG Course: 2021_25 II_Dat

Attempt 1

IP Address: 2409:4072:6e83:8a28:b70c:f697:c15a:536b Tab switches: 5 OS used: Android
Browser used: Chrome

Test Duration: 00:00:55

Test Start Time: Jun 3, 2022 | 08:07 AM

Test Submit Time: Jun 3, 2022 | 08:09 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 19.32 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.70 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 20
Question Wrong: 0
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Which of the following real-world scenarios would you associate with a stack data structure?



piling up of chairs one above the other CORRECT

☐ people standing in a line to be serviced at a counter

☐ offer services based on the priority of the customer

☐ All of the listed options

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Stacks

Question No: 2

Multi Choice Type Question

Report Error

Which of the following array element will return the top-of-the-stack-element for a stack of size N elements(capacity of stack > N).

☒ S[N-1] CORRECT

☐ S[N]

☐ S[N-2].

☐ S[N+1]

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Stacks

Question No: 3

Multi Choice Type Question

Report Error

Which of the following is true about linked list implementation of stack?

- ☐ In push operation, if new nodes are inserted at the beginning of linked list, then in pop operation, nodes must be removed from end.
- ☐ In push operation, if new nodes are inserted at the end, then in pop operation, nodes must be removed from the beginning.
- ☐ Both of these
- ☒ None of the listed options **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

Subject: Stacks

Question No: 4

Multi Choice Type Question

Report Error

A single array $A[1..MAXSIZE]$ is used to implement two stacks. The two stacks grow from opposite ends of the array. Variables $top1$ and $top2$ ($top1 < top2$) point to the location of the topmost element in each of the stacks. If the space is to be used efficiently, the condition for "stack full" is

- ☐ ($top1 = MAXSIZE/2$) and ($top2 = MAXSIZE/2+1$)
- ☐ $top1 + top2 = MAXSIZE$
- ☐ ($top1 = MAXSIZE/2$) or ($top2 = MAXSIZE$)
- ☒ $top1 = top2 - 1$ **CORRECT**

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

Subject: Stacks**Question No: 5****Multi Choice Type Question****Report Error**

Assume that the operators $+$, $-$, \times are left associative and $^$ is right associative. The order of precedence (from highest to lowest) is $^$, \times , $+$, $-$. The postfix expression corresponding to the infix expression $a + b \times c - d \wedge e \wedge f$ is

☒ $abc \times + def \wedge \wedge -$ **CORRECT**

☐ $abc \times + de \wedge f \wedge -$

☐ $ab + c \times d - e \wedge f \wedge$

☐ $- + a \times bc \wedge \wedge def$

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** Data Structures**Subject:** Stacks**Question No: 6****Multi Choice Type Question****Report Error**

Consider the following operation performed on a stack of size 5.

Push(1);

Pop();

Push(2);

Push(3);

Pop();

Push(4);

Pop();

Pop();

Push(5);

After the completion of all operation, the no of element present on stack are

☐ 0

☒ 1

CORRECT

☐ 2☐ 3

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Stacks

Question No: 7

Multi Choice Type Question

Report Error

Following code takes a number as an argument, and uses a stack S to do processing.

```
1 void fun(int n)
2 {
3     Stack S; // Say it creates an empty stack S
4     while (n > 0)
5     {
6         // This line pushes the value of n%2 to stack S
7         push(&S, n%2);
8
9         n = n/2;
10    }
11
12    // Run while Stack S is not empty
13    while (!isEmpty(&S))
14        printf("%d ", pop(&S)); // pop an element from S and print it
15 }
16
```

☐ Prints binary representation of n in reverse order☒ Prints binary representation of n CORRECT☐ Prints the value of Logn☐ Prints the value of Logn in reverse order

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Stacks

Question No: 8

Multi Choice Type Question

Report Error

Following is an incorrect pseudocode for the algorithm which is supposed to determine whether a sequence of parentheses is balanced:

Which of these unbalanced sequences does the above code think is balanced?

```
1 declare a character stack
2 while ( more input is available)
3 {
4   read a character
5   if ( the character is a '(' )
6     push it on the stack
7   else if ( the character is a ')' and the stack is not empty )
8     pop a character off the stack
9   else
10    print "unbalanced" and exit
11 }
12 print "balanced"
13
```

☒ ((())

CORRECT

☐ ()())

☐ (()))

☐ (())())

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

Subject: Stacks

Question No: 9

Multi Choice Type Question

Report Error

If the sequence of operations - push (1), push (2), pop, push (1), push (2), pop, pop, pop, push (2), pop are performed on a stack, the sequence of popped out values



2,2,1,1,2

CORRECT



2,2,1,2,2



2,1,2,2,1



2,1,2,2,2

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Stacks**Question No: 10****Multi Choice Type Question****Report Error**

'Array implementation of Stack is not dynamic', which of the following statements supports this argument?



space allocation for array is fixed and cannot be changed during run-time CORRECT



user unable to give the input for stack operations



a runtime exception halts execution



All of the listed options

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Stacks**Question No: 11****Multi Choice Type Question****Report Error**

Insertion and deletion operation in queue is known as

- ☐ Push and Pop
- ☐ Insert and Delete
- ☒ Enqueue and Dequeue **CORRECT**
- ☐ None of the listed options.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Queues

Question No: 12**Multi Choice Type Question****Report Error**

Suppose a circular queue of capacity $(n - 1)$ elements is implemented with an array of n elements. Assume that the insertion and deletion operation are carried out using REAR and FRONT as array index variables, respectively. Initially, $\text{REAR} = \text{FRONT} = 0$. The conditions to detect queue full and queue empty are

- ☒ Full: $(\text{REAR}+1) \bmod n == \text{FRONT}$, empty: $\text{REAR} == \text{FRONT}$ **CORRECT**
- ☐ Full: $(\text{REAR}+1) \bmod n == \text{FRONT}$, empty: $(\text{FRONT}+1) \bmod n == \text{REAR}$
- ☐ Full: $\text{REAR} == \text{FRONT}$, empty: $(\text{REAR}+1) \bmod n == \text{FRONT}$
- ☐ Full: $(\text{FRONT}+1) \bmod n == \text{REAR}$, empty: $\text{REAR} == \text{FRONT}$

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Queues

Question No: 13**Multi Choice Type Question****Report Error**

A normal queue, if implemented using an array of size MAX_SIZE, gets full when

☒ Rear = MAX_SIZE - 1 CORRECT

☐ Front = (rear + 1)mod MAX_SIZE

☐ Front = rear + 1

☐ Rear = front

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Queues

Question No: 14

Multi Choice Type Question

Report Error

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

☐ Only front pointer

☐ Only rear pointer

☒ Both front and rear pointer CORRECT

☐ None of the front and rear pointer

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Queues

Question No: 15

Multi Choice Type Question

Report Error

If the elements "A", "B", "C" and "D" are placed in a queue and are deleted one at a time, in what order will they be removed?



ABCD

CORRECT



DCBA



DCAB



ABDC

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Queues**Question No: 16****Multi Choice Type Question****Report Error**

If the MAX_SIZE is the size of the array used in the implementation of circular queue. How is rear manipulated while inserting an element in the queue?



rear=(rear%1)+MAX_SIZE



rear=rear%(MAX_SIZE+1)



rear=(rear+1)%MAX_SIZE

CORRECT



rear=rear+(1%MAX_SIZE)

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Hard**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Queues**Question No: 17****Multi Choice Type Question****Report Error**

After performing these set of operations, what does the final list look contain?

```
1 InsertFront(10);
2 InsertFront(20);
3 InsertRear(30);
4 DeleteFront();
5 InsertRear(40);
6 InsertRear(10);
7 DeleteRear();
```

```
7 deleteRear();  
8 InsertRear(15);  
9 display();
```

☐ 10 30 10 15

☐ 20 30 40 15

☐ 20 30 40 10

☒ 10 30 40 15

CORRECT

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Queues

☐ Show solution

Question No: 18

Multi Choice Type Question

Report Error

Consider the following pseudo-code. Assume that IntQueue is an integer queue. What does the function fun do?

```
1 void fun(int n)  
2 {  
3     IntQueue q = new IntQueue();  
4     q.enqueue(0);  
5     q.enqueue(1);  
6     for (int i = 0; i < n; i++)  
7     {  
8         int a = q.dequeue();  
9         int b = q.dequeue();  
10        q.enqueue(b);  
11        q.enqueue(a + b);  
12        ptint(a);  
13    }  
14 }
```

- ☐ Prints numbers from 0 to n-1
- ☐ Prints numbers from n-1 to 0
- ☒ Prints first n Fibonacci numbers **CORRECT**
- ☐ Prints first n Fibonacci numbers in reverse order.

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Queues**Question No:** 19**Multi Choice Type Question****Report Error**

Let Q denote a queue containing sixteen numbers and S be an empty stack. $\text{Head}(Q)$ returns the element at the head of the queue Q without removing it from Q . Similarly $\text{Top}(S)$ returns the element at the top of S without removing it from S . Consider the algorithm given below.

The maximum possible number of iterations of the while loop in the algorithm is_____

```
while  $Q$  is not Empty do  
  if  $S$  is Empty OR  $\text{Top}(S) \leq \text{Head}(Q)$  then  
     $x := \text{Dequeue}(Q);$   
     $\text{Push}(S, x);$   
  else  
     $x := \text{Pop}(S);$   
     $\text{Enqueue}(Q, x);$   
  end  
end
```

- ☐ 16
- ☐ 32
- ☒ 256 **CORRECT**
- ☐

64

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Queues**Question No:** 20**Multi Choice Type Question****Report Error**

Suppose you are given an implementation of a queue of integers. The operations that can be performed on the queue are:

- i. isEmpty (Q) – returns true if the queue is empty, false otherwise.
- ii. delete (Q) – deletes the element at the front of the queue and returns its value.
- iii. insert (Q, i) – inserts the integer i at the rear of the queue.

Consider the following function:

What operation is performed by the above function f ?

```
1 void f (queue Q) {  
2   int i ;  
3   if (!isEmpty(Q)) {  
4     i = delete(Q);  
5     f(Q);  
6     insert(Q, i);  
7   }  
8 }
```

☐ Leaves the queue Q unchanged

☒ Reverses the order of the elements in the queue Q **CORRECT**

☐ Deletes the element at the front of the queue Q and inserts it at the rear keeping the other elements in the same order

☐ Empties the queue Q

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** Data Structures**Subject:** Queues

Result & Analysis

Student: GUGAN S Email id: 727821tuit025 Test: IRC_DSA THROUG Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 0 OS used: Windows Browser used: Chrome

Test Duration: 00:02:01

Test Start Time: Jun 4, 2022 | 09:48 AM

Test Submit Time: Jun 4, 2022 | 09:51 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.72 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.32 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 1
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 19
Question Wrong: 1
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Which of the following technique is faster for traveling in binary trees?

☐ Iteration



Recursion

CORRECT

☐ Both (A) and (B)☐ Depends from compiler to compiler

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 2

Multi Choice Type Question

Report Error

The inorder and preorder traversal of a binary tree is d b e a f c g and a b d e c f g, respectively. The postorder traversal of the binary tree is:

☒ d e b f g c a

CORRECT

☐ e d b f g c a☐ e d b g f c a☐ d e f g b c a

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 3

Multi Choice Type Question

Report Error

Heap exhibits the property of a binary tree?

☒ True

CORRECT

☐ False

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 4

Multi Choice Type Question

Report Error

What is the major data structure used in hierarchical data model?

☒ Trees **CORRECT**

☐ List

☐ Stack

☐ Graphs

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 5

Multi Choice Type Question

Report Error

Suppose that we have numbers between 1 and 1000 in a binary search tree and we want to search for the number 365. Which of the following sequences could not be the sequence of nodes examined?

☐ 4, 254, 403, 400, 332, 346, 399, 365

☐ 967, 913, 246, 925, 260, 364, 312

☒ 926, 203, 912, 241, 913, 246, 364 **CORRECT**

☐ 4, 401, 389, 221, 268, 384, 383, 280, 365

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 6

Multi Choice Type Question

Report Error

Binary trees can have how many children?

☒ 2

CORRECT

☐ any number of children☐ 1☐ atleast 1

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 7

Multi Choice Type Question

Report Error

What are the children for node 'w' of a complete-binary tree in an array representation?

☒ $2w$ and $2w+1$

CORRECT

☐ $2+w$ and $2-w$ ☐ $w+1/2$ and $w/2$ ☐ $w-1/2$ and $w+1/2$

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Hard

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 8

Multi Choice Type Question

Report Error

What is the parent for a node 'w' of a complete binary tree in an array representation when w is not 0?

☒ floor(w-1/2) CORRECT

☐ ceil(w-1/2)

☐ w-1/2

☐ w/2

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 9

Multi Choice Type Question

Report Error

If the tree is not a complete binary tree then what changes can be made for easy access of children of a node in the array ?

☒ every node stores data saying which of its children exist in the array CORRECT

☐ no need of any changes continue with $2w$ and $2w+1$, if node is at i

☐ keep a separate table telling children of a node

☐ use another array parallel to the array with tree

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 10

Multi Choice Type Question

Report Error

Consider a situation of writing a binary tree into a file with memory storage efficiency in mind, is array representation of tree is good?

- ☐ yes because we are overcoming the need of pointers and so space efficiency
- ☐ yes because array values are indexable
- ☒ No it is not efficient in case of sparse trees and remaning cases it is fine **CORRECT**
- ☐ No linked list representation of tree is only fine

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Tree traversal**Question No:** 11**Multi Choice Type Question****Report Error**

Suppose the elements 7, 2, 10 and 4 are inserted, in that order, into the valid 3- ary max heap found in the above question, Which one of the following is the sequence of items in the array representing the resultant heap?

- ☒ 10, 7, 9, 8, 3, 1, 5, 2, 6, 4 **CORRECT**
- ☐ 10, 9, 8, 7, 6, 5, 4, 3, 2, 1
- ☐ 10, 9, 4, 5, 7, 6, 8, 2, 1, 3
- ☐ 10, 8, 6, 9, 7, 2, 3, 4, 1, 5

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Medium**Question type:** MCQ Single Correct **Subject:** Programming **Subject:** Data Structures**Subject:** Tree traversal**Question No:** 12**Multi Choice Type Question****Report Error**

What is common in three different types of traversals (Inorder, Preorder, and Postorder)?

- ☐ Root is visited before right subtree
- ☒ Left subtree is always visited before right subtree **CORRECT**
- ☐ Root is visited after left subtree
- ☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 13

Multi Choice Type Question

Report Error

What does the following function do for a given binary tree?

```
int fun(struct node *root)
{
    if (root == NULL)
        return 0;
    if (root->left == NULL && root->right == NULL)
        return 0;
    return 1 + fun(root->left) + fun(root->right);
}
```

- ☐ Counts leaf nodes
- ☒ Counts internal nodes **CORRECT**
- ☐ Returns height where height is defined as number of edges on the path from root to deepest node
- ☐ Return diameter where diameter is number of edges on the longest path between any two nodes.

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 14

Multi Choice Type Question

Report Error

What output does the below pseudo code produces?

```
1 Tree_node function(Tree_node x)
2 {
3     Tree_node y = x.left;
4     x.left = y.right;
5     y.right = x;
6     return y;
7 }
8
```

☒ right rotation of subtree **CORRECT**

☐ left rotation of subtree

☐ zig-zag operation

☐ zig-zig operation

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Hard

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 15

Multi Choice Type Question

Report Error

Statement 1: When a node is split during insertion, the middle key is promoted to the parent as well as retained in right half-node.

Statement 2: When a key is deleted from the leaf, it is also deleted from the non-leaf nodes of the tree.

☒ Statement 1 is true but statement 2 is false **CORRECT**

☐ Statement 2 is true but statement 1 is false

☐ Both the statements are true

☐ Both the statements are false

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 16

Multi Choice Type Question

Report Error

What is a complete binary tree?

☐ Each node has exactly zero or two children

☐ A binary tree, which is completely filled, with the possible exception of the bottom level, which is filled from right to left

☒ A binary tree, which is completely filled, with the possible exception of the bottom level, which is filled from left to right **CORRECT**

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 17

Multi Choice Type Question

Report Error

Which of the following cannot generate the full binary tree?

☐ Inorder and Preorder☒ Inorder and Postorder☐ Preorder and Postorder☐ None of the listed options CORRECT

Status: Wrong

Mark obtained: 0/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Tree traversal

Question No: 18

Multi Choice Type Question

Report Error

Construct a binary tree using inorder and level order traversal given below.

Inorder Traversal: 3, 4, 2, 1, 5, 8, 9

Level Order Traversal: 1, 4, 5, 9, 8, 2, 3



CORRECT



Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Binary tree

Question No: 19

Multi Choice Type Question

Report Error

In simple chaining, what data structure is appropriate?

☐ Singly linked list

☒ Doubly linked list **CORRECT**

☐ Circular linked list

☐ Binary trees

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Question No: 20

Multi Choice Type Question

Report Error

Can a tree stored in an array using either one of inorder or post order or pre order traversals be again reformed?

☐ yes just traverse through the array and form the tree

☒ No we need one more traversal to form a tree **CORRECT**

☐ No in case of sparse trees

☐ None of the listed options

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Tree traversal

Result & Analysis

Student: GUGAN S Email id: 727821tuit025 Test: IRC_DSA THROUG Course: 2021_25 II_Dat

Attempt 1

IP Address: 117.239.103.181 Tab switches: 0 OS used: Windows Browser used: Chrome

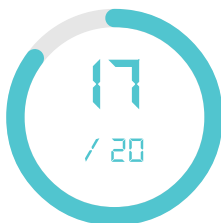
Test Duration: 00:01:54

Test Start Time: Jun 4, 2022 | 09:51 AM

Test Submit Time: Jun 4, 2022 | 09:54 AM

Download

Overall score



Rank: NA
Topper score: 20.00 / 20
Average score: 18.80 / 20
Least score: 0.00 / 20

MCQ



Rank: NA
Topper score: 20.00 / 20
Average score: 19.13 / 20
Least score: 0.00 / 20

Overall Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 17
Question Wrong: 3
Partially Correct: 0
Question Not Viewed: 0

MCQ - Question Status



Total Questions: 20
Questions Attempted: 20
Questions Correct: 17
Question Wrong: 3
Partially Correct: 0
Question Not Viewed: 0

Topic wise Analysis

MCQ



Question No: 1

Multi Choice Type Question

Report Error

Which of the following statements for a simple graph is correct?



Every path is a trail

CORRECT



Every trail is a path

☐ Every trail is a path as well as every path is a trail

☐ None of the mentioned

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Easy

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

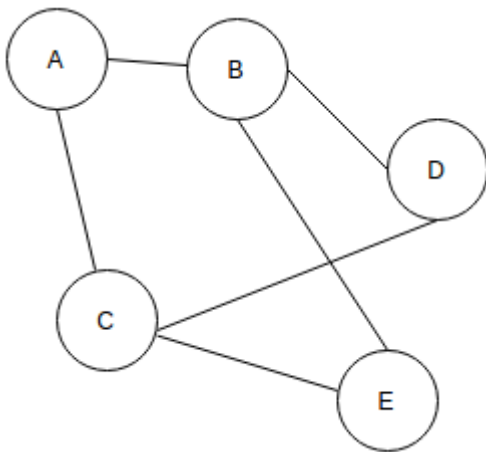
Subject: Graphs

Question No: 2

Multi Choice Type Question

Report Error

For the given graph(G), which of the following statements is true?



☐ G is a complete graph

☐ G is not a connected graph

☒ The vertex connectivity of the graph is 2 **CORRECT**

☐ The edge connectivity of the graph is 1

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 3

Multi Choice Type Question

Report Error

If a simple graph G , contains n vertices and m edges, the number of edges in the Graph G' (Complement of G) is

☒ $(n*n-n*2*m)/2$ **CORRECT**

☐ $(n*n+n*2*m)/2$

☐ $(n*n-n*2*m)/2$

☐ $(n*n-n+2*m)/2$

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 4

Multi Choice Type Question

Report Error

Which of the following is true?

☐ A graph may contain no edges and many vertices

☒ A graph may contain many edges and no vertices **CORRECT**

☐ A graph may contain no edges and no vertices

☐ None of the mentioned

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy

Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 5

Multi Choice Type Question

[Report Error](#)

For a given graph G having v vertices and e edges which is connected and has no cycles, which of the following statements is true?

☐ $v=e$ ☒ $v = e+1$ CORRECT☐ $v + 1 = e$ ☐ None of these

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Graphs

Question No: 6

Multi Choice Type Question

[Report Error](#)

Which of the following ways can be used to represent a graph?

☐ Adjacency List and Adjacency Matrix☐ Incidence Matrix☒ Adjacency List, Adjacency Matrix as well as Incidence Matrix CORRECT☐ None of these

Status: Correct

Mark obtained: 1/1

Hints used: 0

Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Graphs

Question No: 7

Multi Choice Type Question

[Report Error](#)

A graph having an edge from each vertex to every other vertex is called a

☒ Tightly Connected CORRECT

☐ Strongly Connected

☐ Strongly Connected

☐ Loosely Connected

Status: Correct Mark obtained: 1/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Graphs

Question No: 8

Multi Choice Type Question

[Report Error](#)

What is the maximum possible number of edges in a directed graph with no self loops having 8 vertices?

☒ 28

☐ 64

☐ 256

☐ 56 CORRECT

Status: Wrong Mark obtained: 0/1 Hints used: 0 Level: Medium

Question type: MCQ Single Correct Subject: Programming Subject: Data Structures

Subject: Graphs

Question No: 9

Multi Choice Type Question

[Report Error](#)

What is the maximum number of edges present in a simple directed graph with 7 vertices if there exists no cycles in the graph?

☐ 21☐ 7☒ 6 **CORRECT**☐ 49

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 10**Multi Choice Type Question****Report Error**

What is time complexity to check if a string(length S1) is a substring of another string(length S2) stored in a Directed Acyclic Word Graph, given S2 is greater than S1?

☒ $O(S1)$ **CORRECT**☐ $O(S2)$ ☐ $O(S1+S2)$ ☐ $O(1)$

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 11**Multi Choice Type Question****Report Error**

Which of the given symbols represent nodes having at least one child?

☐ iv) and v)

☐ iii) iv) and v)☒ i) and ii) **CORRECT**☐ i) and iii)

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 12**Multi Choice Type Question****Report Error**

What are the dimensions of an incidence matrix?

☐ Number of edges*number of edges☒ Number of edges*number of vertices **CORRECT**☐ Number of vertices*number of vertices☐ None of the mentioned statements

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 13**Multi Choice Type Question****Report Error**How many undirected graphs (not necessarily connected) can be constructed out of a given set $V = \{V_1, V_2, \dots, V_n\}$ of n vertices ?☒ $n(n-1)/2$ ☐ 2^n

☐ n!☐ $2^{n(n-1)/2}$ CORRECT

Status: Wrong **Mark obtained:** 0/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 14**Multi Choice Type Question****Report Error**

Let G be a simple graph with 20 vertices and 8 components. If we delete a vertex in G, then number of components in G should lie between

☐ 8 and 20☐ 8 and 19☒ 7 and 19 CORRECT☐ 7 and 20

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 15**Multi Choice Type Question****Report Error**

The data structure required for Breadth First Traversal on a graph is

☐ Stack☐ Array☒ Queue CORRECT☐

Iree

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Easy
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 16**Multi Choice Type Question****Report Error**

A connected planar graph having 6 vertices, 7 edges contains _____ regions.

☐ 15☒ 3 **CORRECT**☐ 1☐ 11

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures
Subject: Graphs

Question No: 17**Multi Choice Type Question****Report Error**

Which of the following properties does a simple graph not hold?

☒ Must be connected **CORRECT**☐ Must be unweighted☐ Must have no loops or multiple edges☐ Must have no multiple edges

Status: Correct **Mark obtained:** 1/1 **Hints used:** 0 **Level:** Medium
Question type: MCQ Single Correct **Subject:** Programming **Subject:** Data Structures

Subject: Graphs**Question No: 18****Multi Choice Type Question****Report Error**

What would be the number of zeros in the adjacency matrix of the given graph?

☐ 10☒ 6 **CORRECT**☐ 16☐ 0**Status: Correct****Mark obtained: 1/1****Hints used: 0****Level: Medium****Question type: MCQ Single Correct Subject: Programming Subject: Data Structures****Subject: Graphs****Question No: 19****Multi Choice Type Question****Report Error**

In a simple graph, the number of edges is equal to twice the sum of the degrees of the vertices.

☒ **True**☐ False **CORRECT****Status: Wrong****Mark obtained: 0/1****Hints used: 0****Level: Easy****Question type: MCQ Single Correct Subject: Programming Subject: Data Structures****Subject: Graphs****Question No: 20****Multi Choice Type Question****Report Error**

Incidence matrix and Adjacency matrix of a graph will always have same dimensions?

☐ True☒ False

CORRECT

Status: Correct**Mark obtained:** 1/1**Hints used:** 0**Level:** Easy**Question type:** MCQ Single Correct**Subject:** Programming**Subject:** Data Structures**Subject:** Graphs