



# BANGLADESH UNIVERSITY OF BUSINESS AND TECHNOLOGY (BUBT)

## Department of Computer Science and Engineering

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### EXAMINATION SCRIPT

(To be filled up by class teacher)

Question No.	Mark Obtained
Total Mark	

(This part is to be filled up by students)

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Intake - Section:	44-7
Program:	B.Sc. in CSE
Course code:	EEE 101
Course title:	Computer Science and Engineering
Trimester:	Summer 2020
Exam type:	Final Exam
Date:	25 November, 2020
Question option:	

Ans to the que no:01-(a)

Ans to the que No: 1 (a)

```
#include <iostream>
#include <conio.h>
using namespace std;
class Name_string
{
public:
    string string1, string2;
    Name_string()
    {
        string1 = "Hasam";
    }
    Name_string(string S, int length)
    {
        string2 = S;
    }
}

int main()
{
    string S;
    cin >> S;
    int l = S.length();
```

Q. (a) i. write a C++ program

```
Name_string s1;
```

```
Name_string s2 (s, 1);
```

```
cout << s1.string1 << " " << s2.string2 << endl;
```

```
getch ();
```

```
}
```

Ans to the Que no : 01-(b)

Ans to the que No: 01-(b)

```
#include <iostream>
using namespace std;
class Name - String
{
public:
    string string1, string2;
    Name - String ()
    {
        string1 = "Hasan";
    }
    Name - String (string s, int length)
    {
        string2 = s;
    }
};

int main()
{
    string s, s3;
```

cin >> s;

int l = s.length();

Name - String s1;

Name - String s2(s, l);

s3 = s1 + s2;

cout << s3 << endl;

return 0;

}

output  
(input) Taken input  
Zobayero  
HasanZobayero

Ans To The Que 02(a)

Ans to the que NO: 2 (a)

```
#include <iostream>
#include <conio.h>
using namespace std;
```

```
class IntegerArray
```

```
{
```

```
public:
```

```
int *data;
```

```
int size;
```

```
IntegerArray (int size)
```

```
{
```

```
data = new int [size];
```

```
this -> size = size;
```

```
cout << size << endl; /* missing code, which I've written
```

```
and run it */
```

```
}
```

```
};
```



```

int main()
{
    Integer Array    arr(100000)

    getCh();

}

```

There is a missing line in the following program. For the missing line, it's occurring a new problem, which stopping the program to show a valid output. To show the valid output, I have added a new line in the program. Following as, "cout << size << endl; "

Ans To The Question-2(b)

```
Ans to the que NO: 02-(b)

#include <iostream>
#include <conio.h>
using namespace std;

class IntegerNumbers {
    int value;
public:
    IntegerNumbers (int value = 0)
    {
        this->value = value;
    }

    IntegerNumbers operator ++ (int)
    {
        IntegerNumbers temp;
        temp.value = value ++;
        return temp;
    }

    void display ()
    {
        cout << "value = " << value << endl;
    }
};
```



```
int main()
```

```
{  
    IntegerNumbers N(10);
```

```
    IntegerNumbers obj = N++;
```

```
    obj.Display();
```

```
}
```

yes, we can use member function to do so and it is called operator overloading. To explain why, let's imagine we've a defined class integer for handling operation on integers. we can have function add(), subtract(), multiply() and divide() for handling the respective operations. To make the code, more intuitive and enhance readability, it is preferred to use operators that correspond to the given operations (+, -, \*, /) respectively i.e. we can replace the following code.

Ans To The Que No : 03-(a)

Ans to the que NO: 3-a

```
#include <iostream>
using namespace std;
class Greatest
{
public:
    void xyz (double p, double q, double r)
    {
        if (x > y && x > z)
            cout << "largest number is : " << x << endl;
        else if (y > x && y > z)
            cout << "largest number is : " << y << endl;
        else
            cout << "largest number is : " << z << endl;
    }
};
```

Q-3: Write a program to find the greatest of three numbers (a, b, c)

int main()

{

double m, n, o;

cin >> m >> n >> o;

Greatest obj;

obj.xyz(m, n, o);

return o;

if (m > n && m > o) {  
 cout << "m is the greatest number";  
}

else if (n > m && n > o) {  
 cout << "n is the greatest number";  
}

else {  
 cout << "o is the greatest number";  
}

Ans to The Que No ; 03-(b)

Ans to the que NO:- 3(b)

```
#include <iostream>
using namespace std;
class Greatest
{
public:
    void xyz(double p, double q, double r)
    {
        if (x > y && x > z)
            cout << "largest number is : " << x << endl;
        else if (y > x && y > z)
            cout << "largest number is : " << y << endl;
        else
            cout << "largest number : " << z << endl;
    }
}
```

(3-b-i) ni  
void xyz()

{  
cout << "This function will be called  
when there are no parameter" << endl;  
}

};  
int main()

{  
double m, n, o;  
cin >> m >> n >> o;  
Greafest obj;  
obj.xyz(m, n, o);  
obj.xyz();  
return 0;  
}

Ans To The Que No 04-(a)

Ans to the Q. NO: 4-(a)

In the following question:

class B and class C is in multilevel inheritance  
so when we try to convert multilevel inheritance  
into multiple inheritance the error occurred

(class D)

so, we can't convert multilevel inheritance  
into multiple inheritance.

So, the right code is:

Next page to code :



```
#include <iostream>
#include <conio.h>
using namespace std;
```

```
class A
{
public:
    int a, b, add;
    void sum(int a, int b)
    {
        add = a + b;
        cout << add;
    }
}
```

```
};
```

```
class B: public A
```

```
{
```

```
};
```

```
class C: public A
```

```
{
```

```
};
```

```
class D: public C
```

```
{
```

```
};
```

```
int main()
```

```
{
```

```
    D myObj;
```

```
    myObj.sum(10, 5);
```

```
    return 0;
```

```
}
```

Q-1: up all of ans

< include < iostream >

using namespace std;

int main()

{

cout << "Hello World!" << endl;

return 0;

}

};

}

}

}

};

}

}

};

}

}

Ans To The Que No : 04-(b)

Ans to the que NO: 4-(b)

```
#include <iostream>
#include <conio.h>
using namespace std;

class Server {
public:
    void SO {
        cout << "This is class Server\n";
    }
};

class OtherServer : public Server {
public:
    void SO {
        cout << "This is class OtherServer\n";
    }
};
```

Q-1 for exp. all at once

```
int main() {
```

```
Server myServer;
```

```
OtherServer myOtherServer;
```

```
myServer.SU;
```

```
myOtherServer.SU;
```

```
getch();
```

```
}
```