

7/12/19 (M)

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[This question paper contains 16 printed pages]

**Your Roll No.** : .....

**Sl. No. of Q. Paper** : **7401** **J**

**Unique Paper Code** : 32341101 - OC

**Name of the Course** : **B.Sc.(Hons.) Computer Science**

**Name of the Paper** : **Programming Fundamentals Using C++**

**Semester** : **I**

**Time : 3 Hours**

**Maximum Marks : 75**

**Instructions for Candidates :**

- Write your Roll No. on the top immediately on receipt of this question paper.
- Question NO.1 is compulsory in **Section-A.**
- Attempt any **four** questions from **Section-B.**
- Parts of a question should be attempted together.

P.T.O.

**Section-A**

1. (a) State error(s) if any, in each of the following code segments: 1×5=5

(i) int main()

```
{
    const double p1;
    int n;
    p1 = 3.141;
    n = 2;
}
```

(ii) class fun

```
{
    private:
    public:
    ~fun (int x );
}
```

(iii) int myfun1(int x, y )

```
{
    int myfun2(int x )
    {
        int t = x*2;
        return( t );
    }
    return y;
}
```

- (iv) In the following code segment, assume that MyClass is the base class and YourClass is the derived class

```
MyClass ob1;
YourClass ob2;
ob2 = ob1;
```

- (v) class A{ };  
class B{ };  
void myfunction() throw ( A )  
{  
 throw B();  
}

- (b) Give the output that will be produced on execution of each of the following program segments:  $2 \times 5 = 10$

(i) {  
 string str1 = "Delhi ";  
 string str2 = "Delhi1";  
 int i = str1.compare  
 (0,3,str2,0,3);  
 cout << i << endl;  
}

(ii) string str1 = "The c++  
 standard";  
int i = str1.find ("c");  
int j = str1.rfind("c");

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```
cout << i << " " << j << endl;
(iii) int x = 3 , y = 4 , z = 5;
      if ( x < y++) || ( z++ > 0)
          cout << x << " " << y << " " << z;
```

```
(iv) int main()
    {
        for ( int i = 0 ; i < 8 ; i++)
        {
            if ( i%2 == 0)
                cout << i+1 << endl;
            else if (i%3 == 0) continue;
            else if (i%5 == 0) break;
            cout << " end of loop" << endl;
        }
        cout << "end of prog" << endl;
    }
```

(v) Assuming  $x_1, x_2, x_3$  are integer variables, give the output in each of the following two cases (consider each case independently) and justify your answer.

```
if (x1)
```