

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- April 2018

B.Tech IVth Semester

COURSE CODE: 10B11CI311

MAX. MARKS: 25

COURSE NAME: Object Oriented Programming

COURSE CREDITS: 4

MAX. TIME: 1.5 Hr

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

Q1. Write Briefly

[1x5=5 marks]

- What is the importance of scope resolution in C++?
- What is the difference between compile and run time polymorphism?
- What is the friend and inline function? Explain with one example?
- Differentiate static & dynamic binding?
- What is virtual destructor?

Q2. Predict the output of below C++ programs

[5 marks]

```
a) #include<iostream>
using namespace std;
class Test {
int value;
public:
Test(int v);
};
Test::Test(int v) {
value = v;
}
int main() {
Test t[100];
return 0;}
```

```
b) #include<iostream>
using namespace std;
int &fun() {
static int a = 10;
return a;
}
int main() {
int &y = fun();
y = y + 30;
cout<<fun();
return 0;
}
```

Q3. Why do we need virtual functions? When do we make a virtual function "Pure"?

[3, 2 marks]

Q4. a) what is operator overloading? Why is it necessary to overload an operator?

[2.5 marks]

b) What is the difference between Public & private inheritance? Explain with one example?

[2.5 marks]

Q5. a) Write a program in C++ using class array that prints the elements stored in the array data member in reverse order.

[2.5 marks]

b) How binary operators are overloaded? Write a C++ program to overload relational operator > and ==? [2.5 marks]

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