

C.U.SHAH UNIVERSITY

Wadhwan City

Subject Code : 4TE02OOP1

Summer Examination-2014

Date: 04/06/2014

Subject Name : Object Oriented Programming (OOP)

Branch/Semester:- B.Tech/II

Time:02:00 To 5:00

Examination : Regular

Instructions:-

- (1) Attempt all Questions of both sections in same answer book / Supplementary
- (2) Use of Programmable calculator & any other electronic instrument is prohibited.
- (3) Instructions written on main answer Book are strictly to be obeyed.
- (4) Draw neat diagrams & figures (If necessary) at right places
- (5) Assume suitable & Perfect data if needed

SECTION-I

- Q-1**
- | | | |
|-----|---|-----------|
| (a) | Define: Class and Object. | 02 |
| (b) | Define: Data Encapsulation and Polymorphism. | 02 |
| (c) | What are the differences between Constructor and Destructor? | 02 |
| (e) | Find out the output of following C++ code. Assume all the libraries have been included and code is syntactically corrected. | 01 |

```

main()
{
    int m=5;
    int n= m++ * ++m;
    cout<<"m="<<m<<endl;
    cout<<"n="<<n<<endl;
}

```



- Q-2**
- | | | |
|-----|--|-----------|
| (a) | Differentiate between Call by Value and Call by Reference with suitable example. | 04 |
| (b) | Explain Function Overloading with suitable example. | 05 |
| (c) | Explain Inline Function with suitable example. | 05 |

OR

- Q-2**
- | | | |
|-----|---|-----------|
| (a) | Explain Friend Function in details. | 04 |
| (b) | Explain Static Data Member with suitable example. | 05 |
| (c) | Explain Default Arguments with suitable example. | 05 |

- Q-3**
- | | | |
|-----|---|-----------|
| (a) | 1) Enlist characteristics of Constructors also explain Parameterized Constructor. | 04 |
| | 2) Explain Constructor Overloading with suitable example. | 03 |
| (b) | Define a Class "complex" having data members as real and imag and member functions as add_comp() & show_comp(). Write a C++ program to get information of 2 complex numbers and add these 2 complex numbers and display this result using Overloaded Constructor Concept. | 07 |

OR

- Q-3 (a)** Define a Class “student” having data members as roll_no, std_name, marks of 3 subjects and member functions as get_data() & put_data. Write a C++ program to get information of 3 students and find and display the total marks of each student. **07**
- (b)** Differentiate Procedure Oriented Programming and Object Oriented Programming. **07**

SECTION-II

- Q-4 (a)** Define Following Terms. **01**
- Type Conversion **01**
 - Inheritance **01**
 - Operator Overloading **01**
 - Pointer **01**
 - Run time polymorphism **01**
 - Compile time polymorphism **01**
- (b)** Find out the output of following C++ code. Assume all the libraries have been included and code is syntactically corrected. **01**

```
main()
{
    int a=5;
    int *p;
    p=&a;
    cout<<"a"<<+>(*p)<<endl;
}
```

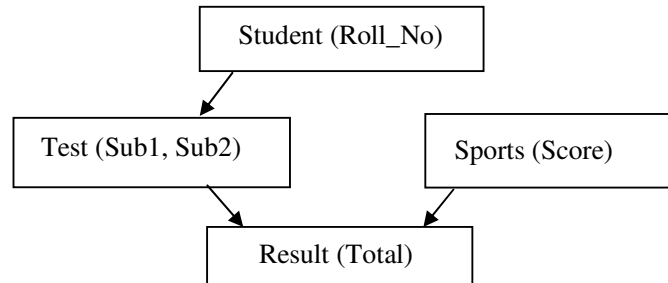


- Q-5 (a)** Enlist types of type conversion. Explain any one of them with example. **05**
- (b)** Explain Unary Operator overloading with suitable example. **05**
- (c)** List out types of Inheritance. Explain Single inheritance with suitable example. **04**

OR

- Q-5 (a)** Explain Binary Operator overloading with suitable example. **05**
- (b)** Explain Containership with suitable example. **05**
- (c)** Explain virtual function with suitable example. **04**

- Q-6 (a)** Write a C++ program to implement following Class hierarchy to create, modify and display information using Inheritance concept: **07**



- (b)** Write A C++ program to Overload unary minus (-) operator using Operator Overloading Concept. **07**



OR

- Q-6 (a)** 1) Explain following file functions with suitable example **03**
a.) open()
b.) close()
c.) tellp()
- 2) Explain following file functions with suitable example (Any two). **04**
a.) seekg()
b.) seekp()
c.) tellg()
- (b)** Explain Multilevel inheritance with suitable example. **07**

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