

**2006-PUNJAB TECHNICAL UNIVERSITY**  
**B.TECH IV SEMESTER DEGREE EXAMINATION**  
**OBJECT ORIENTED PROGRAMMING**  
**(COMPUTER SCIENCE ENGINEERING)**

TIME-3HOUR  
MARKS-60

**Note: Section A is compulsory. Attempt any Four questions from Section B and two from Section C**

**SECTION A MARKS 2 EACH**

1. What is a manipulator? Why do we need it?
2. What is the advantage of using streams for I/O operations in C++?
3. What is name mangling?
4. What is the difference between by passing argument by value to that of reference?
5. What is the advantage of contiguous memory allocation in arrays?
6. If a and b are two arrays of the same type, can the statement a=b work?
7. How is structure passed to a function?
8. How is memory allocated to structure variables?
9. What is null pointer?
10. Can we write a[i] as i[a]?

**SECTION B MARKS 5 EACH**

II Explain the following with examples:

1. setbase
2. setfill().

III What is the difference between actual and formal arguments? Explain the relationship between them.

IV What is an array of characters? Where are they used?

V What is a structure? How can the structure be nested?

**SECTION C MARKS 10 EACH**

VI What is void\* pointer? What is its use?

VII What is operator overloading? Explain binary operator overloading.

VIII What is inheritance? How it is implemented? Distinguish between public and private inheritance.

IX What are virtual functions and pure virtual functions? Where are they used. Explain.