

(i) Printed Pages : 2

20/12/2023 (E)  
Roll No. ....

(ii) Questions : 9

Sub. Code :

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Exam. Code :

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10

B.A./B.Sc. (General) 3<sup>rd</sup> Semester

(2123)

COMPUTER SCIENCE

Paper-CS06 Theory-B Object Oriented Programming  
Using (C++)

Time Allowed : Three Hours]

[Maximum Marks : 30

**Note :—** Attempt five questions in all, including Question 9 (Section-E) which is compulsory and selecting one question each from Sections A-D.

**SECTION—A**

1. (a) What is OOP ? Describe its various advantages over procedural language.  
(b) Discuss various methods of passing the arguments to a function.  $2 \times 3 = 6$
2. What do you mean by array ? Describe the usage of array in a class with suitable example.  $1 \times 6 = 6$

**SECTION—B**

3. Write the usage of static and friend member functions in C++ with suitable example.  $1 \times 6 = 6$

4. (a) Describe the purpose of private member functions in C++.  
(b) Describe the concept of pass by reference arguments in C++.

2×3=6

### SECTION—C

5. (a) What do you mean by the destructors ? Describe with suitable example.  
(b) Write various advantages of inheritance in C++.

2×3=6

6. What is multilevel inheritance ? Describe with suitable C++ code.

1×6=6

### SECTION—D

7. What is virtual function ? Describe its various rules.  
8. (a) Discuss various operators that can't be overloaded in C++.  
(b) What is function overloading ? Discuss its benefits.

2×3=6

### SECTION—E

9. Explain the following keywords/functions/terms in C++ :  
(a) Scope resolution operator (::)  
(b) `seekp( )`  
(c) pass by value  
(d) `malloc`  
(e) constructor  
(f) friend.

1×6=6