

B.Sc. - II (CBCS Pattern) Semester-III  
**USCST06 - Computer Science Paper-II - Object Oriented Programming with C++**

P. Pages : 2

Time : Three Hours



**GUG/S/25/11603**

Max. Marks : 50

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram wherever necessary.
  3. Avoid vague answer and write specific answers related to questions.

**Either:**

1. a) What is overloading? Explain function overloading in detail. 5
- b) Write a program in C++ to find area of circle having radius value. 5

**OR**

- c) What is Function? Explain function Prototyping in C++. 5
- d) Write a C++ program to find the sum of odd numbers among N natural numbers. 5

**Either:**

2. a) Write advantages of oops. 5
- b) Explain the following terms: 5
  - i) Static Data Members
  - ii) Static Member Function

**OR**

- c) Write a program in C++ to enter marks of 3 subjects. Find total and average using class. 5
- d) Write a note on access specifier- 5
  - i) Private
  - ii) Public

**Either:**

3. a) Define inheritance. Explain single inheritance with suitable example. 5
- b) Write a C++ program to overload unary plus operator. 5

**OR**

- c) Write a note on dynamic constructor. 5
- d) Explain derived class with suitable example. 5

**Either:**

4. a) What do you mean by friend function? What are the rules for friend function. 5
- b) Explain & and \* operators. Explain how following expressions will be evaluated. 5
- i) \*P++ ii) ++\*P

**OR**

- c) Explain Error Handling during file operations. 5
- d) Write a program in C++ to create a data file student.dat containing two fields roll no and name of student. 5
5. Attempt all the questions.
- a) Write a short note on endl manipulator. 2½
- b) List applications of OOPs. 2½
- c) Write a note on const object. 2½
- d) Write a short note on 'this' pointer. 2½

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