

B.Sc.-II (Information Technology) (CBCS Pattern) Semester - IV  
**004 - Paper-IV : Object Oriented Programming C++**

P. Pages : 2

Time : Three Hours



**GUG/S/23/11972**

Max. Marks : 40

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

**Either:**

1. a) Explain console I/O operations in detail. 4
- b) Explain the following- 4
- i) Call by value ii) Call by reference

**OR**

- c) Define and explain function overloading using suitable example. 4
- d) Explain the Inline function with suitable example. 4

**Either:**

2. a) Explain the procedural programming in detail. 4
- b) Explain the following- 4
- i) Data Member ii) Member function

**OR**

- c) Write a program in CPP to overload Sum() function for add two integers, to add three real and add three integers. 4
- d) Explain the following- 4
- i) Arrays within class ii) Arrays of objects

**Either:**

3. a) Explain the parameterized constructors in detail. 4
- b) Explain the following- 4
- i) Dynamic constructors ii) Destructors

**OR**

- c) Define inheritance. Explain different types of inheritance in detail. 4
- d) Create a constructor for 'Integer' class with M and N as data members and constructor for initialize data member. 4

**Either:**

4. a) Explain the pointer to objects in detail. 4  
b) Write a short note on virtual function using suitable example. 4

**OR**

- c) Explain error Handling during file operations in detail. 4  
d) Write a CPP program which demonstrate use of 'this' pointer. 4
5. Solve **all** the questions.
- a) Explain the manipulators in detail. 2  
b) Explain the objects as function arguments in detail. 2  
c) Explain the copy constructors in short. 2  
d) Explain the 'this' pointer in detail. 2

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