

B.C.A. - II (CBCS Pattern) Semester-IV
UBCAT404 - Paper-IV : Object Oriented Programming Using C++

P. Pages : 2

Time : Three Hours



GUG/S/25/11978

Max. Marks : 40

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat & labelled diagrams use supporting data wherever necessary.
 3. Avoid vague answers & write specific points/answers related to questions.

Either:

1. a) Describe Console I/O operations in detail. 4
- b) Write a CPP program that will ask for a temperature in Fahrenheit & display in Celsius. 4

OR

- c) Explain following- 4
 - i) Manipulators
 - ii) Function overloading
- d) Write a CPP program to find roots of Quadratic Equations. 4

Either:

2. a) Explain procedural programming Vs OOP? 4
- b) Design inline functions for add & multiply of two integer numbers. 4

OR

- c) Describe class & sub-class using suitable example. 4
- d) Write a CPP program to overload “sum ()” function for add two integers, to add three real & add three integers. 4

Either:

3. a) Define parameterized constructor? Explain Multiple Constructor in class? 4
- b) Write CPP program for following series- 4
$$\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \dots$$

OR

- c) Design a class “complex” with real & imaginary members also design appropriate member function to get & print complex numbers. 4
- d) Define Unary & Binary operator overloading. Explain Rules for operator overloading? 4

Either:

4. a) Define pointer? Explain following- 4
- i) This pointer
- ii) “New” & Delete operator
- b) Write a CPP program for following- 4
- $\cos x = 1 - x^2/2! + x^4/4! - x^6/6! + \dots$

OR

- c) Describe on sequential Input & output operations in detail? 4
- d) Design a class “Employee” with appropriate member. Demonstrate Array of objects. 4
5. Solve all questions below-
- a) Enlist Basic elements of programming. 2
- b) Explain characteristics of OOP. 2
- c) Explain constructor & Destructor in Derived classes. 2
- d) Describe Command Line Argument in brief. 2
