

B.Sc. (I.T) II (CBCS Pattern) Sem-IV
UBITT404 - Paper-IV : Object Oriented Programming C++

P. Pages : 2

Time : Three Hours



GUG/S/19/11972

Max. Marks : 40

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

1. Either:-

- a) What is function overloading? Write C++ program to demonstrate "Sum ()" function overload for 4
 - i) Two integer arguments
 - ii) Two real arguments
- b) Define argument. Explain default argument with an example. 4

OR

- c) Define array? Explain different types of array with suitable example. 4
- d) Define manipulator. Write down the various manipulator used in C++ with an example. 4

2. Either:-

- a) List the various features of OOPs supported by C++ and explain any four of them. 4
- b) Explain the use of public, private and protected access specifiers with an example. 4

OR

- c) What is static? Explain with an example static data member and member functions. 4
- d) Differentiate procedural programming Vs object oriented programming. 4

3. Either:-

- a) Define constructor. Explain parameterized constructor with an example. 4
- b) What is inheritance? Explain types of inheritance with example. 4

OR

- c) What is mean by overloading operator? Write down the rules for operator overloading. 4
- d) Design a class 'Employee' with empno, ename, salary as data members and create copy constructor to create objects from already created objects. 4

4. Either:-
- a) Explain the friend function & define rule for friend function with suitable example. 4
 - b) Write C++ program to which copy a contents from one file to another. 4

OR

- c) Define virtual functions? Explain different rules for virtual functions also explain the concept of pure virtual function. 4
 - d) Explain 'this', 'new', 'delete' operations with examples. 4
5. Solve all the questions.
- a) Difference between while and do---while looping statements. 2
 - b) Define encapsulations? Explain with example. 2
 - c) Explain copy constructors in C++. 2
 - d) Explain error handling during file operations. 2
