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Total Pages : 02

BT-3/D-22

43141

COMPUTER SCIENCE AND ENGINEERING

Object Oriented Programming

PC-CS-203

Time : Three Hours]

[Maximum Marks : 75

Note : Attempt any *Five* questions. All questions carry equal marks.

1. (a) When do we need to use default arguments in a function ? What is the main advantage of passing arguments by reference ?
(b) Write a C++ program to swap two numbers using pointers.
2. (a) Write an object oriented program in C++ to count the number of occurrences of the specific character in the text.
(b) What is the difference between early binding and late binding in C++ ?
3. (a) What are the differences between static and dynamic memory ?
(b) What is inheritance ? What are the advantages and disadvantages of inheritance ?

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P.T.O.

4. (a) What are the specific characteristics of constructor functions ?
- (b) Differentiate between compile time polymorphism and runtime polymorphism.
5. (a) Under what circumstances overloading using friend function becomes necessary ?
- (b) Give reasons for assigning protected visibility specifier to a class member.
6. (a) What is a virtual base class ? Why is it important to make a class virtual ?
- (b) What is the use of declaring the virtual destructors under multiple inheritance ?
7. (a) Explain, how array of class objects can be stored and retrieved from a file ?
- (b) How to overload Template function ? Explain.
8. (a) What is Exception ? How to catch multiple exceptions ?
- (b) Write a program for catching array out of bound exception.