

Roll No.

8492

Printed Pages : 3

BT-4 / M-17

OBJECT ORIENTED PROGRAMMING

Paper-CSE-202 N

Time allowed : 3 hours]

[Maximum marks : 75

Note : Attempt five questions in all, selecting at least one question from each unit.

Unit-I

1. (a) What are header files ? How can you create your own header file ? Explain with an example. 5
(b) What is the concept of namespace in C++ ? Explain its importance. 5
(c) What is encapsulation ? How is it implemented in C++ ? 5
2. (a) Distinguish between compile-time and run-time polymorphism. 5
(b) Explain the need of protected access specifier. 5
(c) How can you access members of a class ? Explain two different ways. 5

Unit-II

3. (a) What is static data member ? Explain its use with suitable example. 5
(b) What is copy constructor ? Explain with an example. 5

8492

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(2)

- (c) Explain dynamic memory allocation and deallocation in C++ by giving examples. 5
4. (a) What are derivations rules in C++ ? Explain. 5
(b) How can you pass parameters to parameterized constructor of base class ? Explain with an example. 5
(c) What is multilevel inheritance ? Give one example in C++. 5

Unit-III

5. (a) What is virtual function ? Explain the rules to override the virtual function. 5
(b) Explain the need of virtual destructor with an example. <http://www.kuonline.in> 5
(c) What is abstract class ? How can you create it in C++ ? Give an example. 5
6. (a) What are rules to overload binary operator ? Overload '<' operator to compare objects of Distance class. Distance is given in feet and inches. 7
(b) What are rules to overload unary operator ? Overload '+' operator to increment day of Date class. 8

Unit-IV

7. (a) What are function templates ? Write a function template to find largest of three numbers. 8

8492

(3)

- (b) How can you limit a function to throw exceptions ?
Explain with an example. 7
- 8. (a) Distinguish between text and binary file. Explain
different functions used for reading and writing a
text file in C++. 7
- (b) How can you create and access a random access file
in C++ ? Explain with an example. 8