FirstRanker.com
Firstranker's choice
www.FirstRanker.com www.FirstRanker.com

Roll No. | | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 18

B.Tech. (CSE/ECE/IT) (2012 to 2017) (Sem.–3)

OBJECT ORIENTED PROGRAMMING USING C++

Subject Code : BTCS-305

M.Code : 56595

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Answer briefly :

1) What is data abstraction?

2) What do you mean by dynamic initialization of objects?

3) List down at least 3 differences between Static and Dynamic Memory Allocation.

4) "*Inheritance supports the concept of reusability*". Comment.

5) What is a friend function and friend class?

6) Explain control structures.

7) What is a reference variable? What is its major use?

8) Define Constructor and Destructor.

9) How is polymorphism achieved at compile time and runtime?

10) Differentiate between static and dynamic binding.

www.FirstRanker.com

www.FirstRanker.com

FirstRanker.com
Firstranker's choice
www.FirstRanker.com www.FirstRanker.com

SECTION-B

11) What is the use of default & copy constructors? Is a constructor mandatory for a Class? Explain by giving examples in each case.

12) Explain how base class member functions can be invoked in a derived class if the derived class also has a member function with the same name.

13) What is a virtual function? Explain its usage with example.

14) Explain what is overloaded operator & how does a compiler proceed to execute an overloaded operator.

15) Write a program to exchange values between two classes using the concept of friend functions.

SECTION-C

16) Write a class to represent a vector (a series of float values). Include member functions to perform the following tasks :

    a) To create the vector

    b) To modify the value of a given element

    c) To multiply by a scalar value

    d) To display the vector in the form (10, 20, 30,...)

    e) Write a program to test your class

17) Write a program to overload the plus operator to add two complex numbers.

18) What is the use of class templates? Explain the different ways to instantiate a template functions.

www.FirstRanker.com

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

www.FirstRanker.com