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

Total No. of Questions : 18

B.Tech. (CSE/ECE/IT/Electronics Engg/Electronics & Computer Engg)
(2012 to 2017)   (Sem.–3)
OBJECT ORIENTED PROGRAMMING USING C++
Subject Code : BTCS-305
M.Code : 56595

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS 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 the use of an Abstract class?

2. What is a Friend function? Why is it required?

3. What are the properties of a static member function?

4. What is meant by Overloading Operators?

5. What are the differences between the Accesses specifies private and protected?

6. Explain briefly what Exception Handling is.

7. List the syntax of any two functions used to display output to the user in C++.

8. What are the differences between sequential and random access files?

9. What are Dangling Pointers?

10. What is the purpose of defining a Destructor function?

SECTION-B

11. What is Object Oriented Programming? Distinguish between Procedure Oriented Programming and Object Oriented Programming.

12. Write a program in C++ to print first N prime numbers, where N is the integer value entered by user.

13. Explain the concepts of Function Overloading and Function Overriding with the help of examples.

14. What is a Template? Explain with the help of an example how to create a Function Template.

15. Explain the concept of Virtual and Pure Virtual Functions with the help of examples.

SECTION-C

16. Create a class which keeps track of the number of its instances and also assigns unique identification to each of them. Use static data member, constructors and destructors to maintain updated information about active objects.

17. What is inheritance? Explain with example how to inherit a class in C++. Also show in what order the constructors are called in a class hierarchy when an object of a derived class is created?

18. What are the two methods available for opening the files? Write a program to write characters onto a file and to read characters from a file.

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.