GN-447

21

III Semester B.C.A. Examination, December - 2019
(F+R) (CBCS) (Y2K14)
COMPUTER SCIENCE
BCA 303 : Object Oriented Programming Using C++

Time : 3 Hours

Max. Marks : 70

Instruction : *Answer **all** sections.*

SECTION - A

I.   Answer **any ten** questions. Each question carries **two** marks.   **10x2=20**

1. List any two differences between procedure oriented programming and object oriented programming.

2. What are the different memory management operators in C++ ?

3. What are the different access specifiers provided for the class members ?

4. Write any two differences between constructors and destructors.

5. What do you mean by hybrid inheritance ?

6. Define : (a) Base class   (b) Derived class

7. What is a pure virtual function ?

8. What is the use of 'this' pointer ?

9. What are the different types of functions ?

10. What is the use of tellg( ) and tellp( ) functions ?

11. How do you detect the end of a file ?

12. Write the syntax of getline( ) method.

P.T.O.

SECTION - B

II. Answer **any five** questions. Each question carries **10** marks.   **5x10=50**

13. (a) Explain briefly about default constructors and parameterised   **5**
        constructors.

   (b) Write a C++ program for shopping list which demonstrates array of   **5**
        objects.

14. (a) Explain single inheritance and multiple inheritance with suitable   **5**
        examples.

   (b) Explain the concept of operator overloading with an example.   **5**

15. Explain in detail all the basic concepts of Object Oriented Programming.   **10**

16. (a) What is polymorphism ? Explain the two types of polymorphism.   **5**

   (b) Write a C++ program to demonstrate the friend function.   **5**

17. (a) Explain the different types of templates.   **5**

   (b) What is an exception ? What are the different exception handling   **5**
        mechanisms ?

18. (a) Explain the concept of an inline function with an example.   **5**

   (b) What do you mean by 'Pass by value' and 'Pass by reference' in   **5**
        functions ?

19. (a) What is a manipulator ? Write short notes on four pre-defined   **5**
        manipulators available in C++.

   (b) Explain the concept of function overriding with an example.   **5**

20. Write short notes on :

   (a) Binary files   **3**

   (b) Error handling in files   **4**

   (c) Command-line Arguments   **3**

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