



GN-447

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 constructors. **5**
(b) Write a C++ program for shopping list which demonstrates array of objects. **5**
- 14.** (a) Explain single inheritance and multiple inheritance with suitable examples. **5**
(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 mechanisms ? **5**
- 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 functions ? **5**
- 19.** (a) What is a manipulator ? Write short notes on four pre-defined manipulators available in C++. **5**
(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**