

QP CODE: 19101909



Reg No : .....

Name : .....

**B.Sc./BCA DEGREE (CBCS) EXAMINATION, MAY 2019**

**Second Semester**

**Core Course - CS2CRT06 - OBJECT ORIENTED PROGRAMMING USING C++**

(Common for B.Sc Computer Applications Model III Triple Main, B.Sc Computer Science Model III, B.Sc Information Technology Model III, Bachelor of Computer Application)

2017 ADMISSION ONWARDS

E27BCBCF

**Maximum Marks: 80**

**Time: 3 Hours**

**Part A**

Answer any **ten** questions.

Each question carries **2** marks.

1. Define structured programming.
2. If  $a=5$ ;  $b=++a$ ; What will be the value of  $a$  and  $b$ ?
3. What is the difference between ordinary functions & member functions?
4. Explain the memory allocation of class data member and member function.
5. What is a friend class?
6. Write the general form of defining a constructor in a derived class?
7. What is constructor overloading?
8. What is the syntax for defining a derived class in inheritance?
9. What is abstract class?
10. What is use of pure virtual function?
11. What is file stream?
12. What are the different file pointers?

(10×2=20)

**Part B**

Answer any **six** questions.

Each question carries **5** marks.

13. What is the advantage of reference variable?





14. Explain inline function.
15. What are static data members and static member function? Explain.
16. Explain destructors.
17. Write a program to overload binary operator using friend function.
18. Give an example for multi-level inheritance.
19. Explain constructors in derived class.
20. Write a program to print address of an object using this pointer.
21. Write a note on unformatted I/O operation.

(6×5=30)

### Part C

Answer any **two** questions.

Each question carries **15** marks.

22. a. Explain difference between call by reference and call by value method of function call with example  
b. What is function overloading explain with example and valid syntax?
23. (a) What is array of objects?  
(b) Write a program to find the difference of two complex numbers using friend function?
24. With the help of example, explain the difference between overloading an operator using member function and friend function.
25. (a) What is inheritance, explain different types of inheritance?  
(b) How can you pass parameters to the constructors of base classes in multiple inheritance?

(2×15=30)

