

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**



**B.Sc.DEGREE EXAMINATION –COMPUTER SCIENCE**

**THIRD SEMESTER – APRIL 2018**

**CS 3502– OBJECT ORIENTED PROGRAMMING WITH C++**

Date: 05-05-2018

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

**PART – A**

**Answer ALL questions:**

**(10x2=20)**

1. Define function prototype. Give example.
2. Differentiate Call by value and Call by reference.
3. Enumerate the characteristics of a member function.
4. What are constructors and destructors?
5. What is virtual function? Give example.
6. Define 'this' pointer?
7. Write notes on various file mode of operations.
8. Write the syntax to open a file?
9. What do we mean by function templates?
10. What are constructs used in Exceptions handling?

**PART – B**

**Answer ALL questions:**

**(5x8=40)**

11. a. Explain the basic concepts of OOPS with suitable Examples.

**(or)**

- b. Explain different types of function calls with suitable examples.

12. a. What is a constructor? Write all its types with example program.

**(or)**

- b. What is the need for array of objects? How multiple objects are accessed? Give an example.

13. a. Write a program to overload prefix and postfix operators using member function and friend function.

**(or)**

14.a. Explain in detail about formatted console I/O operations.

**(or)**

b. How will you create text files? Explain it with suitable example.

15. a. Explain elaborately about exception handling mechanism with example.

**(or)**

b. Briefly explain about the syntax of a class template with suitable program.

### **PART – C**

**Answer any TWO questions:**

**(2x20=40)**

16.a. What is friend function? Discuss its use with suitable program.

b. Explain dynamic initialization of objects with example.

17.a. Explain in detail about various types of inheritance with suitable program

b. Explain the different file modes with example.

18.a. Explain in detail the C++ standard exceptions.

b. Write a C++ program for unary operator and binary operator over loading.

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