LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



B.C.A. DEGREE EXAMINATION – **COMPUTER APPLICATIONS**

THIRD SEMESTER - NOVEMBER 2016

CA 3502 - OBJECT ORIENTED PROGRAMMING WITH C++

Date: 04-11-2016	Dept. No.	Max. : 100 Marks
Time: 00:00 12:00	L	ı

PART - A

Answer ALL Questions

 $(10 \times 2 = 20 \text{ marks})$

- 1. List any two features of object oriented programming.
- 2. Define Inline functions.
- 3. What is a copy constructor?
- 4. How is a member function of the class defined?
- 5. What are the types of Polymorphism?
- 6. Which operators cannot be overloaded?
- 7. What is an istream class?
- 8. List the stream class names for file operations.
- 9. What is a Class Template?
- 10. Define Exception.

PART - B

Answer ALL Questions

 $(5 \times 8 = 40 \text{ marks})$

- 11. a) Discuss about Function Overloading with an example.
 - (or)
 - b) Explain any two categories of operators with examples.
- 12. a) Explain how to create a class and declare objects with a simple program.

(or)

- b) Discuss about Destructors with an example.
- 13. a) Write notes on (i) Abstract Class (ii) Virtual Base Class.

(or)

- b) Explain overloading of a unary and a binary operator with an example.
- 14. a) Discuss about file pointers and their manipulators.

(or)

- b) Write notes on (i) get() (ii) put() (iii) getline() (iv) write().
- 15. a) Discuss about Function Templates with an example.

(or

b) Discuss about the basic steps involved in exception handling mechanisms and rethrowing an exception.

PART - C

Answer Any TWO Questions

 $(2 \times 20 = 40 \text{ marks})$

- 16. a) Discuss about the various control structures available in C++ with examples.
 - b) What is a Constructor? Explain its types with examples.
- 17. a) What is inheritance? Explain any two types of inheritance with suitable examples.
 - b) Write a C++ program to write text data to a file and print the contents of the file in lower case letters. Explain the file functions used.
- 18. a) Explain how exceptions are handled using try..catch statements in C++.
 - b) Explain the following: (i) Friend Function (ii) Any 5 basic OOP concepts.

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