



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.C.A.DEGREE EXAMINATION –COMPUTER APPLICATIONS

FIRST SEMESTER – NOVEMBER 2018

16/17/18PCA1MC02– OBJECT ORIENTED PROGRAMMING THROUGH C++

Date: 27-10-2018

Dept. No.

Max. : 100 Marks

Time: 01:00-04:00

PART – A

Answer all Questions:

(10 x 2 = 20)

1. Differentiate procedure oriented and object oriented language.
2. Mention the basic concepts of OOPs.
3. What is recursion? Give example.
4. Mention the features of friend function.
5. Define abstract class.
6. What are memory management functions? List them.
7. What are exceptions? Write the general form of try and catch.
8. Define stream. List the file stream classes.
9. What are generic functions ? Write the general form of template function declaration.
10. State the uses of the keywords, typename and export.

PART – B

Answer all Questions:

(5 x 8 = 40)

- 11.a. Write short notes on storage class specifiers.
(OR)
b. Explain the preprocessor directives used in C++ .
- 12.a. Explain the categories of functions with example for each.
(OR)
b. Illustrate the pointers to arrays with an example.
13. a. Explain the data conversion between different types with examples.
(OR)
b. Illustrate virtual function with an example
- 14.a. What are file pointers? Explain the functions for manipulations of file pointers.
(OR)
b. Write short notes on
 - i. exception handling mechanism (5 marks)
 - ii. catch all exceptions (3 marks)
- 15.a. Illustrate the general process of swapping two values using generic functions.
(OR)
b. Explain the implementation of generic functions in sorting.

PART-C

Answer any TWO Questions:

(2 x 20 = 40)

16.a. Explain in detail about operators used in C++..

b. Illustrate the following

- i. Constructor features.(3 marks)
- ii. Types of constructors(7 marks).

17.a. Write short note on the following:

- i. Types of Inheritance.
- ii. Overloading [].

b. Explain the following

- i. Throwing an exception from a function outside try block.
- ii. Localizing try block to a function.

18.a. Illustrate the following with example.

- i. Overloading function template
- ii. "Template class can have more than one generic type".Explain with example.

b.Explain any four control statements with example.
