PGDCA/MSCCS-03/MCA-103/CPCJ

December - Examination 2018

MSCCS / PGDCA / CPCJ/MCA I Year Examination

OOPs Programming with C++ and Java

Paper - PGDCA/MSCCS-03/MCA-103/CPCJ

Time : 3 Hours]

- [Max. Marks :- 100
- **Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A

 $10 \times 2 = 20$

(Very Short Answer Questions)

- **Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.
- 1) (i) Write the Syntax to create a 2- D array in C++
 - (ii) What do you mean by command line arguments?
 - (iii) What is the purpose of static member variables in C++?
 - (iv) What do you mean by array of pointers in C++?
 - (v) For what purpose, delete operator is used in C++?
 - (vi) What is the correct way to access a package in Java?

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(vii) What output following statement would print in Java

a = "Hello"

System. out. println (a+ "Java");

- (viii) What do you mean by focus listeners in event handling in Java?
- (ix) What do you understand by card layout in GUI programming in Java?
- (x) What do you mean by abstract class in Java?

Section - B $4 \times 10 = 40$

(Short Answer Questions)

- **Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.
- 2) Describe the predefined streams in C++.
- Explain the concept of parameter passing in different ways in C++.
- 4) Describe the concept of polymorphism.
- 5) Can we overload each operator in C++? Explain using suitable example.
- Describe the different types of priorities used for threads in Java
- 7) Write a program in Java to accept a year from the user and determine that is leapyear or not.
- 8) How can exception is thrown in Java?
- 9) Differentiate between template and macro in C++.

Section - C

(Long Answer Questions)

- **Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.
- 10) (i) Write a program in Java to accept 10 natural numbers from the user and count the number of positive and negative number out of those 10 numbers.
 - (ii) Explain the concept of method overriding with suitable example.
- 11) (i) Describe the structures in C++.
 - (ii) Explain the types of inheritance used in C++.
- 12) (i) Write a program in C++ using templates to swap two numbers.
 - (ii) Design a calculator for simple operations using GUI programming in Java.
- 13) (i) Explain the file opening modes and file pointers in C++ with suitable example.
 - (ii) Explain the life cycle of a thread.