

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

June - Examination 2017

**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 × 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) List the features of Java.
- (ii) What is Applet?
- (iii) What do you mean by Byte code?
- (iv) How do you declare an array in C++?
- (v) What do you mean by virtual class?
- (vi) Name various types of Inheritance Supported by C++.
- (vii) List the usage of static member variable.

- (viii) When will you make function In Line?
- (ix) Write the syntax of 'for' loop.
- (x) Define OOP.

**Section - B****4 × 10 = 40**

(Short Answer Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

- 2) Write a simple program to access and manipulate data members in C++ and also give its explanation.
- 3) What is class? How does it accomplish data hiding? Give an example.
- 4) What is constructor? How to invoke a constructor function? With an example distinguish between parameterized and copy constructor.
- 5) What is garbage collection? Why it is useful in Java?
- 6) Briefly explain the Delegation Event Model.
- 7) Describe the use of Public, Private and Protected Access specifier.
- 8) What is this pointer? Explain any two characteristics of pointer.
- 9) Write short note on 'Encapsulation'.

**Section - C****2 × 20 = 40**

(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) What is operator overloading? How will you overload binary and unary operator? Discuss both processes with the help of programming implementation.
  - 11) What is Multithreading? Describe various different states of thread life cycle.
  - 12) What are Exception? Explain the concept of Exception Handling with the help of an example.
  - 13) Explain the need of template. How can templates be used for generic programming? Explain with example.
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