

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

June - Examination 2016

**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) What do you mean by abstract class?
- (ii) What is the use of this pointer?
- (iii) What is JVM?
- (iv) How class is different from objects?
- (v) What is the use of type cast operator?
- (vi) When do we need to use default arguments in a function?
- (vii) What do you mean by copy constructors?
- (viii) Which operators are used to access members?

- (ix) Give difference between structure and class.
- (x) What is thread?

**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) What is virtual function? Design virtual function to define area of triangle, square / rectangle and circle.
- 3) What do you mean by Access specifier? Discuss various Access specifier in C++.
- 4) Explain various looping structures present in C++ with suitable example.
- 5) Distinguish clearly between 'Macros' and Inline functions? What are the advantages and disadvantages of Inline functions?
- 6) What is applet? Write steps for creating the applet.
- 7) Why Java is called 'Robust' Language? Justify your answer.
- 8) Compare constructors and destructors in C++ with suitable example.
- 9) Write a program to concatenate two strings using operator overloading.

**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 object oriented programming? Discuss various features of object oriented programming.
  - 11) Explain the concept of data hiding. What are the advantages of its application?
  - 12) What do you understand by multithreading? Explain different stages of the thread life cycle with suitable example.
  - 13) What is exception? Write a program to demonstrate the catching of all exception. What happens when a raised exception is not caught by catch-block (in the absence of catching all exception block)?
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