

PGDCA/MSCCS-03/MCA-103/CPCJ

June - Examination 2019

MSCCS/PGDCA/CPCJ/MCAI Year Examination**OOPs Programming with C++ and Java****Paper - PGDCA/MSCCS-03/MCA-103/CPCJ****Time : 3 Hours]****[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A**8 × 2 = 16**

(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 applets?
- (ii) Is C++ a platform independent language?
- (iii) What do you understand by virtual functions in C++?
- (iv) How do you declare an array to integer variable in C++?
- (v) What output following statement would print in C++ –
int b;
b = 6;
cout << (b << 2);

- (vi) What do you mean by implicit type conversion in Java?
- (vii) What do you understand by event listener in Java?
- (viii) What is major difference between Runnable and thread in Java?

Section - B**4 × 8 = 32**

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

- 2) Explain function overloading in C++ with suitable example.
- 3) Describe concept of multiple inheritance with suitable example in C++.
- 4) Demonstrate any one binary operator overloading in C++ with suitable example.
- 5) Explain the concept of new and delete in C++.
- 6) Explain the purpose of using interfaces in Java.
- 7) Describe the concept of constructors in Java with suitable examples.
- 8) Explain the usage of public, private and protected in Java.
- 9) Describe the usage of any four methods in string class in Java.

Section - C**2 × 16 = 32**

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

- 10) (i) Write a program in Java to demonstrate the concept of multithreading using Runnable interface.
- (ii) Write a program in C++ to check the entered number by the user is prime or not.
- 11) (i) Explain the concept of checked and unchecked exceptions in Java using suitable examples.
- (ii) Explain the concept of file handling in C++ using suitable example.
- 12) (i) Write a program in C++ using templates to find the maximum of two values.
- (ii) Explain the concept of inner classes with suitable examples in Java.
- 13) (i) Explain the concept of life cycle of an Applet in Java.
- (ii) Write a program in C++ to find the entered year is leap year or not.
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