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

June - Examination 2026

PGDCA/MSCCS (Previous)/ CPCJ/MCA (Ist Year) Examination

OOPS Programming with C++ and Java

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

[*Time: **3** Hours*] [*Maximum Marks: **80***]

Note :- The question paper is divided into three Sections A, B and C. Write answers as per the given instructions in each section.

Section-A 8×2=16

(Very Short Answer Type Questions)

Note :- Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to **30** words. Each question carries **2** marks.

1. (i) What will be the output of following code fragment in C++?
   cout<<(5 > 3);
   (ii) What will be the output of following code fragment in Java?
   System.out.println("1" + 2 + 3);
   (iii) What is the purpose of 'super' keyword in Java?
   (iv) What is the role of virtual keyword in Polymorphism in C++?
   (v) What is the main difference between process and thread?
   (vi) What is the use of 'implements' keyword in Java?
   (vii) What is the difference between function overloading and function templates?
   (viii) What is difference between *p++ and (*p)++?

Section-B 4×8=32

(Short Answer Type Questions)

Note :- Answer **any four** questions. You have to delimit your each answer maximum up to **200** words. Each question carries **8** marks.

2. Explain the concept of multiple inheritance using an example in C++.
3. What are the life cycle methods of a Java applet?
4. Can a finally block execute without a catch block in Java?
5. Write a C++ program to search an element in an array using pointers.
6. Explain overloading of '+' operator with an example in C++.

7. Explain event delegation model in Java.
8. Write a program to reverse an array in C++.
9. Write a Java program to create a package containing a class for addition of two numbers.

Section-C

2×16=32

(Long Answer Type Questions)

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

10. Explain file handling in C++ using a suitable example.
11. Write short notes on each of the followings -
    (a) Types of inheritance in C++
    (b) Destructors in C++
    (c) GUI in Java
    (d) Dynamic Memory Management in C++
12. Explain thread priorities in Java. How are they assigned and used?
13. (a) Explain the role of an IDE in C++ programming. Discuss its main features such as editor, compiler, debugger and project management.
    (b) Explain difference between static and dynamic binding with respect to overloading in Java.
