

7. What is Applet ? Explain the life cycle of an applet with examples.
8. Explain various conditional statements in C++ with suitable examples.
9. What is Inheritance ? What are the types of inheritance in Java ? Explain with suitable examples.

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

**December – Examination 2021
PGDCA/MSCCS-Previous/MCA
(I Year) Examination**

OOPs Programming with C++ and Java

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

Time : 1½ Hours]

[Maximum Marks : 80

Note :- The question paper is divided into two Sections A and B. Write answers as per the given instructions.

Section-A

4×4=16

(Very Short Answer Type Questions)

Note :- Answer any *four* 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 4 marks.

Section-B

4×16=64

(Short Answer Type Questions)

Note :- Answer any *four* questions. Answer should not exceed **200** words. Each question carries 16 marks.

2. Write a program in C++ to implement an array of objects, creating a class employee and accepting and displaying multiple datasets accepted by the user using an array of objects.
3. Explain structure of a simple Java program with a suitable diagram and example.
4. What is multithreading in Java ? Explain the inter thread communication with the help of a suitable example.
5. Explain the difference between method overriding and method overloading with the help of a suitable example.
6. Explain the steps involved in reading and writing a file in C++. Explain with examples.

1. (i) Differentiate Data Abstraction and Data Hiding.
- (ii) How is memory allocated to objects in C++ ? Give an example.
- (iii) Explain syntax of any *two* String functions in Java.
- (iv) Explain different access specifiers used in C++. Give an example.
- (v) Why is Java called a robust programming language ?
- (vi) What is the use of typecast operators ? Give an example.
- (vii) Differentiate between do..while and while loops on the basis of syntax.
- (viii) Give the difference structure and class. Also explain with a suitable example.