

PGDCA/MSCCS-03/MCA-103/CPCJ

June - Examination 2018

**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 identifies in Java?
- (ii) Name the interface in java that is implemented for creating threads.
- (iii) What do you understand by void pointers in C++?
- (iv) What is the need of wring templates in C++?
- (v) What do you understand by adaptor classes in Java?
- (vi) What are different states of an applet in Java?

- (vii) What do you mean by pure virtual functions in C++?
- (viii) Find the input of following print statements in C++.
- ```
cont << " output is "<< 31/ 3.0;
```
- (ix) Find the output of following statements in Java
- ```
int a = 4, b = 8;  
System . out . print in ("Sum is" + a + b);
```
- (x) What do you mean by checked exceptions?

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) Explain the concept of dynamic binding.
- 3) Explain any four derived data types in C++.
- 4) Explain the access specifiers used in C++.
- 5) Write short notes on execution sequence of constructors and destructors in C++.
- 6) Explain the concept of garbage collection in Java.
- 7) Explain the concept of layout manager for GUI components in Java.
- 8) Describe the event listeners in java with suitable example.
- 9) What major differences do you find between C++ and Java?

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) (i) Write a program in C++ to implement the concept of single inheritance. Explain the logic behind your program.
- (ii) Explain the procedure for creating a new thread in Java writing thread class.
- 11) (i) How do we implement operator overloading writing friend function? Explain with help of a suitable example in C++.
- (ii) Explain the concept of dynamic dispatch method in Java.
- 12) (i) Explain the file handling in C++.
- (ii) Explain the case of multiple catches in C++ (Exception handling)
- 13) (i) Explain the life cycle of an applet in Java.
- (ii) Explain the concept of programmer defined exceptions in Java.
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