

PGDCA/MSCCS-03/MCA-103/CPCJ

December - 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) How to initialize a pointer?
- (ii) What is inline function?
- (iii) What is the use of 'super' keyword in Java?
- (iv) List the types of polymorphism.
- (v) Define the term "encapsulation".
- (vi) Describe the term "object".
- (vii) What is type cast operator?
- (viii) How you can place comments in C++ and Java?

- (ix) What do you mean by multithreaded program?
- (x) What is “cout” in C++?

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.

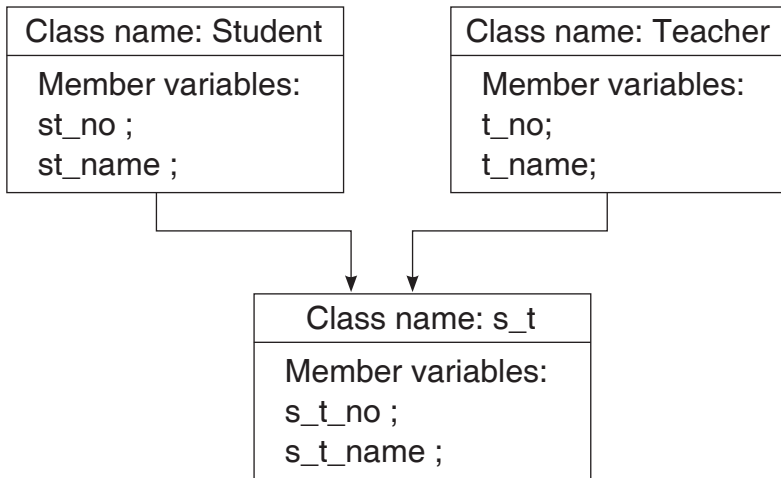
- 2) Compare overloading and overriding of functions with suitable example.
- 3) What is virtual function? Explain its need.
- 4) Write a program to declare a class “employee” consisting of data members emp_no and emp_name. Write the member functions accept() to accept and display() to display the data for 5 employees.
- 5) How to create a class template? Discuss its usage.
- 6) What is interface? What are the uses of interface?
- 7) Write short note on stream in C++.
- 8) Discuss the Applet life cycle with suitable diagram.
- 9) What is garbage collection, why it is useful in 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) What do you mean by Inheritance? Write a program to implement the inheritance as shown in figure:



- 11) What is Run-time polymorphism? Write a program to find the length of a string using operator overloading.
- 12) Why Java is object oriented language? Discuss the features of Java programming language.
- 13) What is heap? Explain how memory is allocate during program execution i.e. on Run time with suitable example.