# PGDCA - 03 / MSC CS - 03 / CPCJ

## December - Examination 2015

# CDCJ / MSCCS / PGDCA Examination

## **OOPs Programming with C++ and Java**

### Paper - PGDCA - 03 / MSC CS - 03 / CPCJ

Time : 3 Hours ]

[ Max. Marks :- 100

#### Section - A

 $10 \ge 2 = 20$ 

(Very short Answer type Questions)

- **Note :** Answer all questions. As per the nature of the question your delimit answer in one word; one sentence or maximum up to 30 words. Each question carries 2 marks.
- (i) What is the difference between Basic and User define Data types?
  - (ii) What do you understand by dynamic binding?
  - (iii) Which object oriented concept is achieved by using overloading and overriding?
  - (iv) What is the difference between a JDK and a JVM?
  - (v) When will you make a function inline?
  - (vi) Define class and object.
  - (vii) Explain finalize() method.

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(viii) What are the Access Specifiers?

- (ix) What is the difference between 'Exception' and 'error' in java?
- (x) Explain difference between constructor and destructor.

(Short Answer Questions)

- **Note :** Answer any four questions. Each answer should not exceed 200 words. Each question carries 10 marks.
- Explain the concept of friend function and classes with the help of an example including its advantages.
- 3) What is object oriented programming? Explain its advantages.
- 4) How Swings are different from Applets? Explain with an example.
- 5) What do you mean by overloading of constructors? How does it benefit the programmer?
- 6) Define packages in java. What are the benefits of using package? Explain with suitable example.
- Explain the difference between the operator new and malloc() function.
- 8) What is byte code? Explain it with an example.
- 9) What is exception handling in java? What are the various types of exception in java?

#### 520 Section - C

(Long Answer Question)

- **Note :** Answer any two questions. You have to delimit your each answer maximum up to 500 words. Each carries 20 marks.
- 10) What is an abstract class? Explain the role of abstract class while building the class hierarchy.
- 11) What do you understand by inheritances? Explain all type of inheritances used in Java.
- 12) What is generic programming? How is it implemented in C++?Write a program to implement swapping using templates.
- What is an interface? Describe the purpose and application of interface. Give an example for defining and implementing interface.