



DPP-5705

M. C. A. (Sem. II) Examination

March / April - 2016

Object Oriented Programming Methodology :

Paper - 201

(Old & New Course)

Time : 3 Hours]

[Total Marks : 70

Instruction :

नीचे दशांशके निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="M. C. A. (Sem. II)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Object Oriented Programming Methodology - 201 (Old & New)"/>	<input type="text"/>
Subject Code No. : <input type="text" value="5"/> <input type="text" value="7"/> <input type="text" value="0"/> <input type="text" value="5"/>	<input type="text"/>
Section No. (1, 2,.....): <input type="text" value="Nil"/>	<input type="text"/>
	<input type="text" value="Student's Signature"/>

- 1 Attempt any **two** : 14
- (a) Compare functional programming with object oriented programming.
- (b) Write a note on aggregation with real world example.
- (c) What is constructor ? How is it useful for instance management.
- 2 Attempt any **two** : 14
- (a) "Multiple inheritance may have call ambiguity with class instance." Justify with example.
- (b) What is abstract class ? Explain its usefulness with example.
- (c) What is friend class ? Why shou we create it ? Explain with example.
- 3 Attempt any **two** : 14
- (a) What is virtual function ? How is it useful for runtime polymorphism ?

- (b) "Data encapsulation is data hiding." Comment on the statement with supporting example.
- (c) Explain different file operations using file pointer and file types.

4 Attempt any **two** : **14**

- (a) What is generalization ? Explain by creating classes in C++.
- (b) How can we restrict a member inheritance in C++?
- (c) Why specialized exception should be written before generalized exception ? Justify your answer with suitable example.

5 Do as directed : **14**

- (a) Create use case diagram and state diagram for following requirement : **7**

Requirements : Customer uses a bank ATM to check balances of his/her bank accounts, deposit funds, withdraw cash and/or transfer funds. ATM Technician provides maintenance and repairs to the ATM.

- (b) Write a program to subtract two different values using function overloading for different data types. **7**
