

Roll No.

Total No. of Questions : 09]

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Paper ID [MC003]

(Please fill this Paper ID in OMR Sheet)

MCA (Sem. - 4th)

OBJECT ORIENTED ANALYSIS & DESIGN (MCA405C) (N2)

(Elective - I)

Time : 03 Hours

Maximum Marks : 60

Instruction to the Candidates:

- 1) Attempt any one question from each sections A, B, C, & D.
- 2) Section E is compulsory.

Section - A

(1 × 10 = 10)

Q1) Write short notes on following:-

- (a) Multiple Inheritance
- (b) Implicit subtyping versus Explicit Inheritance.

Q2) Explain method overriding with a suitable example.

Section - B

(1 × 10 = 10)

Q3) Explain operator overloading of binary operators with a suitable example.

Q4) What is meant by classes within the class? How can we declare a class and object? Explain with the help of example.

Section - C

(1 × 10 = 10)

Q5) Discuss in detail object oriented development.

Q6) What is a template? How are they created? Explain with the help of example.

Section - D

(1 × 10 = 10)

- Q7)** Prepare a detailed object diagram for a participant's registration system for a seminar. Also give appropriate justification for the object diagram.
- Q8)** Discuss the relationship between various models.

Section - E

(10 × 2 = 20)

Q9)

- a) What do you understand by an abstract data type?
- b) How is message passing done in object oriented languages?
- c) Differentiate between a normal function and a macro.
- d) What is encapsulation?
- e) What are friend functions?
- f) What is the difference between public and private derivation?
- g) How are libraries designed?
- h) What is object design?
- i) What is the need modeling?
- j) What is entity relationship modeling?

