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Total No. of Questions : 09] [Total No. of Pages : 02

MCA (Sem. - 2nd)

OBJECT ORIENTED PROGRAMMING USING C++

SUBJECT CODE : MCA - 202

Paper ID : [B0107]

[Note : Please fill subject code and paper ID on OMR]

Time : 03 Hours **Maximum Marks : 60**

Instruction to Candidates:

1) Attempt any one question from each Sections **A, B, C** and **D.**
2) Section - E is **Compulsory.**
3) Use of Non-programmable **Scientific Calculator** is allowed.

Section - A

(1 × 10 = 10)

Q1) Discuss in detail object oriented paradigm.

Q2) Compare various loops and also write a program to find whether the positive number entered by the user is prime or not.

Section - B

(1 × 10 = 10)

Q3) Explain various storage classes in detail with examples.

Q4) Discuss nesting of structures with the help of a suitable example.

Section - C

(1 × 10 = 10)

Q5) Write an interactive program for manipulating "Time" class. Support member functions for adding time members of two objects.

Q6) Write short notes on :-

(a) Inline functions (b) Types of inheritance.

Section - D

(1 × 10 = 10)

Q7) Explain the concept of operator overloading with regards to overloading of "<<" operator.

Q8) Write short notes on :-

(a) Random access file processing. (b) Virtual Functions.

Section - E

(10 × 2 = 20)

Q9)

a) Differentiate between object and class.

b) What is type conversion?

c) What is the need of manipulators?

d) Differentiate between structure and union.

e) Can arrays be initialized at the point of their definition? If yes, explain its syntax with suitable examples?

f) What is nesting of classes? How is it achieved?

g) What are enumerations?

h) What are the merits of friend functions?

i) Briefly explain how a file can be opened in different ways.

j) What is run time polymorphism?