

Roll No.

Total No. of Questions : 69]

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MCA (Sem. - 2nd)

OBJECT ORIENTED PROGRAMMING USING C++

SUBJECT CODE : MCA - 202(N2)

Paper II : [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 & D.**
- 2) Section - E is **Compulsory.**
- 3) Use of Non-programmable Scientific Calculator is allowed.

Section - A

(1 × 10 = 10)

- Q1)** Draw flow chart and write an algorithm to find the largest of three numbers.
- Q2)** What are the various input statements of C++. Explain the features of `iostream.h` file.

Section - B

(1 × 10 = 10)

- Q3)** What are static functions? Explain the difference between the relationship friendship & derivation.
- Q4)** Write a program to find the roots of a quadratic equation.

Section - C

(1 × 10 = 10)

- Q5)** What are constructors & Destructors? Why is it necessary for constructors to know the order of declaration in base class.
- Q6)** Explain how base class member functions can be invoked in a derived class if the derived class also has a member function with the same name.

Section - D

(1 × 10 = 10)

- Q7) Write a program to copy the contents of one file into another using command line arguments. How are binary files different from text files in C++?
- Q8) Design a program to manipulate string class to overload operators, which can perform the function of string concatenation.

Section - E

(10 × 2 = 20)

- Q9)
- What is the use of default constructors?
 - How is (first app) mode different from (jostate mode)?
 - How is object different from a class?
 - What is meant by initialization of a variable?
 - Explain the difference between abstraction & data hiding?
 - Why are classes called Abstract Data Types?
 - What is a static variable?
 - What is function overloading?
 - What is a virtual function?
 - How are structures different from a class?

