

Roll No.

Total No. of Questions : 09]

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MCA (Sem. – 2nd)
OBJECT ORIENTED PROGRAMMING USING C++
SUBJECT CODE : MCA – 202 (N2)
Paper ID : [B0107]

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Attempt any one question from **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) What is object oriented programming? How it is different from structured programming? Explain.

Q2) Write a note on the following:-

- a) Symbolic constants.
- b) Bitwise operators
- c) Break and continue statements

Section – B

(1 × 10 = 10)

Q3) What is recursion? How it is different from iteration? Write a 'C++' to reverse a four digit number using recursion.

Q4) What is preprocessor? Explain its role in C++. What are different types of preprocessor? Explain with examples.

Section – C

(1 × 10 = 10)

Q5) What is constructor? How it is different from destructor? Write a C++ program to implement the concept of copy constructor.

Q6) What Is static function and friend function? Write C++ program to implement the concept of static and friend function.

Section – D

(1 × 10 = 10)

Q7) How it is different from pure virtual function? Write a program in C++ to implement the concept of pure virtual function.

Q8) What is random access file? Write a program in C++ to count the number of vowels in a file.

Section – E

(10 × 2 = 20)

- Q9)**
- a) What is scope of variable? Explain.
 - b) What is operator precedence? Explain.
 - c) What is polymorphism? Explain.
 - d) What is dynamic memory allocation? Explain.
 - e) Explain the difference between exit and break statement.
 - f) Write a C++ program to implement the concept of conditional operator.
 - g) What is use of scope resolution operation in C++? Explain.
 - h) What is inline member function? Illustrate with program.
 - i) What is container class? Explain.
 - j) What is storage class? Explain.

