

Roll No.

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MCA (Sem. - 1st)

OBJECT ORIENTED PROGRAMMING IN C++

SUBJECT CODE : MCA - 102 (2012 & Onward)

Paper ID : [B0129]

Time : 03 Hours

Maximum Marks : 100

Instruction to Candidates:

- 1) Attempt any one Question from Section A,B,C & D.
- 2) Section E is compulsory.
- 3) Use of non programmable scientific calculator is allowed.

Section - A

(1 × 20 = 20)

Q1) What is Object Oriented paradigm ? Explain the role of reusability, overloading and polymorphism in object oriented approach by taking suitable examples.

Q2) Explain the following :

- a) Conditional and Bitwise operator in C++
- b) Jumping statement in C++

Section - B

(1 × 20 = 20)

Q3) What is recursion ? How it is different from iteration ? Write and explain a C++ program to generate Fibonacci series using recursion.

Q4) What is storage class ? Explain various storage classes available in C++ by taking suitable examples.

Section - C

(1 × 20 = 20)

Q5) Explain how a base class constructor be invoked through derived class constructor ? Discuss the need of virtual base class in hybrid inheritance.

Q6) Write notes on the following :

- a) Friend Functions
- b) Dynamic memory allocation

Section - D

(1 × 20 = 20)

- Q7)** What is virtual destructor ? Discuss its need. Explain how virtual destructor is implemented in C++ ?
- Q8)** a) What is file ? Explain how input and output operations are performed in a file using C++.
- b) Write a note on C++ streams.

Section - E

(10 × 2 = 20)

- Q9)** a) What is data type ? List various data types available in C++.
- b) What are break and continue statements ? Explain.
- c) What is pre-processor in C++ ?
- d) What is structure ? How it is different from union ?
- e) What is late binding in C++ ?
- f) What is overriding in C++ ?
- g) List various standard functions available in C++.
- h) What is member function ? Explain
- i) What is exception handling ?
- j) What is need of destructor in C++ programming ?

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