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Roll No. ....

## **MCS-502**

### **Object-Oriented Programming through C++**

Master of Computer Application (MCA-20)

1<sup>st</sup> Semester, Examination June 2022

**Time : 2 Hours**

**Max. Marks:80**

Note : This paper is of eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

#### Section-A

(Long Answer-type questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Twenty (20) marks each. Learners are required to answer any two (02) questions only.

(2 x 20=40)

- Q.1 Explain the features of Object Oriented Programming.
- Q.2 Explain the characteristics of objective-oriented languages?
- Q.3 What is array? Explain the different types of array with example.

P.T.O.

- Q.4 What is Polymorphism? Explain the types of polymorphism with example.
- Q.5 Explain the difference between virtual base classes and abstract classes with the help of example.

### Section-B

(Short Answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Ten (10) marks each. Learners are required to answer any four (04) questions only.

(4 x 10=40)

- Q.1 Explain the static data members and static member functions with example.
- Q.2 Explain the basic data types in C++ with examples.
- Q.3 What is the basic difference between structured programming model and objective oriented programming model?
- Q.4 What is destructor? Explain with example.

P.T.O.

Q.5 What is the difference between Structure and Union?

Q.6 What is exception? Explain exception handling with example.

Q.7 What is the difference between a class and an object?

Q.8 What is inheritance? Explain the types of inheritance.

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