P-875

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MCS-502

Object Oriented Programming Through C++
(MCA/MSCIT)

1st / 3rd Semester Examination, 2023 (June)

Time : 2 Hours]   **Max. Marks : 70**

Note : This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answer to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

SECTION–A
(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nineteen (19) marks each. Learners are required to answer any Two (02) questions only.

                                   (2×19=38)

1. (a) What are the properties of OOPs?

   (b) Explain the different data types of C++ with suitable example.

2. (a) Explain the control structure of C++ with example.

(b) Explain the concept of virtual function with suitable example.

3. (a) What are the different types of operators in C++? Explain with example.

(b) Explain the concept of default constructor, copy constructor and parameterized constructor with the help of suitable C++ program.

4. (a) Discuss and differentiate between overloading and overriding.

(b) Explain the use of pointer in C++.

5. (a) What is inline function? When will you make a function inline and why?

(b) Discuss the need of abstract class in C++.

SECTION–B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.   (4×8=32)

1. Discuss and differentiate between procedural and non-procedural programming.

2. What do you mean by type conversion? Explain all its type.

3. What are the different types of Inheritance in C++?

4. Illustrate the concept of reusability in C++.

5. Explain the use of scope resolution operator and its use in C++.

6. Explain the concept of virtual base class with example.

7. What do you mean by member functions? Explain with suitable example.

8. What do you mean by file handling? Explain the process of open, read, write and close files?

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