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MCA-10/M.Sc.IT-10

Object-oriented programming Through C++

3rd Semester Examination June 2022

Time : 2 Hours Max. Marks : 80

Note : This Paper is of Eighty (80) marks divided into two (02) Section A and B. Attempt the questions contained in these sections according to the detailed instructions given there in.

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 or basic concepts of object oriented programming.

P.T.O.

Q.2 Define a class to represent a bank account. Include the following data members: depositor name, account number, types of account, balance. It will have member function for assigning initial value: depositing an amount, withdrawing amount and checking balance, display name and balance. Write a main program.

Q.3 What is constructor? Explain the properties of constructor? How many types of constructor available in C++. Explain Destructor also.

Q.4 Write a program to overload binary + operator.

Q.5 What is the role of friend functions in Object Oriented Programming? Write a program which shows the use of friend function.

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.

(4 x 10 = 40)

P.T.O.

Q.1 Explain Virtual function and pure virtual function with examples.

Q.2 What is call by value verses call by reference?

Q.3 What is inheritance? Explain different types of inheritance in c++.

Q.4 What is manipulator? Explain with example.

Q.5 Why we use static data member? What are the various properties of static data member? Explain with example.

Q.6 Write a program to demonstrate the concepts of array of object.

Q.7 What is virtual base class? Explain with an example.

Q.8 Write a program to illustrate the working of constructor overloading.

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