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Reg. No……
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2020

OBJECT ORIENTED PROGRAMMING THROUGH C++

[Maximum Marks: 75] [Time: 2.15 Hours]

PART-A

(Answer ***any three*** questions in one or two sentences. Each question carries 2 marks)

I. 1. List the methods to implement Comments in C++.

2. Specify the use of inline functions in C++.

3. What is Data Encapsulation in OOP?

4. List any two operators that cannot be overloaded.

5. What is the purpose of type cast in C++? Give any one type of casting operator. (3 x 2 = 6)

PART-B

(Answer any ***four*** of the following questions. Each question carries ***6*** marks)

II 1. Explain structures in C++.

2. Write a program to search an element in a one dimensional array.

3. Describe the usage of scope resolution operator and dot operator in C++.

4. Explain any three features of object oriented programming.

5. Write short note on friend function with suitable example.

6. Illustrate base class and derived class with suitable syntax.

7. Describe about input/output operators in C++. (4 x 6 = 24)

PART-C

(Answer ***any of the three units*** from the following. Each full question carries 15 marks)

UNIT – I

III (a) Illustrate the working of while and do……..while loops in C++. (8)

(b) Explain about different operators in C++. (7)

OR

IV (a) Describe storage classes in C++. (8)

(b) Write a C++ program to reverse a string. (7)

UNIT - II

V (a) Using suitable C++ program write about the parameter passing to a function by reference variable and by pointer. (8)

(b) Explain function overloading with suitable example. (7)

OR

VI (a) Write an object oriented program to read employee details such as employee name (type string) employee number (type int) and employee salary (type float) using a member function named getdata() and display these details using a member function named display(). (8)

(b) Describe about Constructors with suitable example. (7)

UNIT- III

VII (a) Explain different types of inheritance supported by C++. (9)

(b) Develop an object oriented program for implementing operator overloading for unary operator. (6)

OR

VIII (a) Write an object oriented program to add two complex numbers by overloading '+' operator. (9)

(b) Differentiate between private and public inheritance. (6)

UNIT - IV

IX (a) Demonstrate virtual function with example. (8)

(b) Explain Exception handling in C++. (7)

OR

X (a) Illustrate class template with suitable example. (8)

(b) Explain multiple inheritance. (7)
