TED (15/19) – 3134
(Revision – 2015/19)

A23 -09152

Reg.No……..
Signature……...

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE , APRIL – 2023

OBJECTED ORIENTED PROGRAMMING THROUGH C++

(Maximum Marks : 100) (Time : 3 hours)

PART – A
(Maximum Marks : 10)

Marks

I. Answer **all** questions in one or two sentences. Each question carries 2 marks.

1. Write valid statement in C++ to declare a character array and initialize it as "ABC".
2. Define expression in programming language. Give one example.
3. Define constructor in C++.
4. List any four operators which cannot be overloaded in C++.
5. Define the term exception in C++.

(5x2=10)

PART – B
(Maximum Marks : 30)

II. Answer any **five** of the following questions. Each question carries 6 marks.

1. Explain any three features of C++.
2. Differentiate between exit controlled and entry controlled while loop.
3. Explain type casting operations in C++.
4. Explain default arguments with example.
5. Explain call by reference parameter passing method with example.
6. Write a C++ program to illustrate the overloading of increment operator.
7. Describe following types of inheritance in C++.

   (i) Single Inheritance (ii) Hierarchical Inheritance (iii) Hybrid Inheritance

(5x6=30)

PART – C
(Maximum Marks : 60)
(Answer **one full** question from each unit. Each full question carries 15 marks)

UNIT – I

III. (a) Explain following tokens (3+3+3)

(i) Identifiers. (3)
(ii) Relational operators. (3)
(iii)Logical operators. (3)

(b) Explain about following user defined data types (i) Class (ii) Structure. (6)

OR

IV. Explain following control structures.

(a) (i) If statement (ii) If else statement (iii) switch. (9)

(b) Explain elementary data types in C++. (6)

UNIT – II

V. (a) Explain parametrized constructors . Give one example. (6)

(b) Write a C++ program which will create a student class, then to read and print details (Roll no, Name, Percentage) of N student's. (9)

OR

VI. (a) Explain copy constructors with example. (9)

(b) What are limitations of operator overloading. (6)

UNIT –III

VII. (a) Overload == operator to check two strings are equal or not using friend function. (6)

(b) Explain multiple and multilevel inheritance with example. (9)

OR

VIII. (a) How to initialize base class constructors from derived class. (6)

(b) Overload + operator to concatenate two strings. (9)

UNIT – IV

IX. (a) Define a virtual function in C++? Describe this with the help of a suitable example. (9)

(b) Define templates in C++. Give different types of templates with syntax. (6)

OR

X. (a) Define pure virtual function in C++. Give one example. (8)

(b) What is exception Handling in C++. Give its syntax. (7)

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