TED (15) – 3134

(REVISION — 2015)

Reg. No..

Signature ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

OBJECT ORIENTED PROGRAMMING THROUGH C++

[*Time* : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

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

1. Define enumerated datatype in C++

2. Define default argument.

3. What is the use of constructors in C++ classes ?

4. Discuss composition in C++

5. Define multiple inheritance in C++   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Write a short note on the basic structure of a C++ program.

2. Discuss structure as heterogeneous aggregate.

3. Explain different parameter passing methods in C++

4. What are the limitations of operator overloading ?

5. Explain multilevel inheritance with example

6. Write a note on class templates in C++

7. Discuss pure virtual functions in C++   (5×6 = 30)

[51]

[P.T.O.

Marks

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

Unit — I

III (a) Define functions. What are the different types of functions in C++   9

   (b) Describe the concept of memory management in C++   6

Or

IV (a) Discuss with an example about recursion in C++   9

   (b) Write a program in C++ to find the sum of even numbers up to 'n'.   6

Unit — II

V Explain the basic concepts of Object Oriented Programming.   15

Or

VI (a) Discuss inline functions with suitable example.   9

   (b) Write a note on constructors in C++   6

Unit — III

VII (a) Write a program in C++ to overload relational operator (= =) to compare two strings.   9

   (b) With the help of a sample program, explain hierarchical inheritance.   6

Or

VIII (a) With the help of an example, explain how to overload unary operator.   9

   (b) Explain virtual base class.   6

Unit — IV

IX (a) Explain how the constructor of the base class can be invoked when the object of the derived class is created.   9

   (b) What are the rules for using virtual functions ?   6

Or

X (a) Explain multiple inheritance in C++ with an example program.   9

   (b) Discuss how to use multiple catch statement for handling exception in C++   6

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