(T) Roll No. .....

PAPER ID—15911

B. Tech. EXAMINATION, 2024

(Third Semester)

COMPUTER SCIENCE AND ENGIEERING

Programming with C++

Time : 3 Hours *Maximum Marks : 70*

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all. Q. No. 1 is compulsory. All questions carry equal marks.

1. Explain the following briefly : 7×2=14

(a) Static Member

(b) Objects

(c) Copy Constructor

(d) This Pointer

(e) Abstract Classes

(f) Dangling Pointer

(g) Template.

2. (a) Explain the differences between C++ structure and C++ Classes. 7

(b) Describe the concept of Polymorphism with the help of suitable example. 7

3. In what ways the object-oriented paradigm is better than structured programming paradigm ? Explain briefly the features of OOPS. 14

4. What do you mean by inheritance ? Explain the various types of inheritance with suitable example. 14

5. Describe the following :

(a) Derived Class 7

(b) New and Delete Operator. 7

6. What do you mean by operator overloading ? Write a program to overload + operator to concatenate two strings. **14**

7. What do you mean by virtual function ? What is their importance ? Write a program to show the functioning of virtual function. **14**

8. What do you mean by template ? Differentiate between the function template and class template. **14**

9. What do you mean by exception handling ? How exceptions are handled in C++ ? Explain with suitable example. **14**