

END TERM EXAMINATION

THIRD SEMESTER [B.TECH] JANUARY 2024

Paper Code: CIC211

Subject: Object Oriented Programming Using C++

Time: 3 Hours

Maximum Marks: 75

Note: Attempt any five questions including Q.No.1 which is compulsory.
Select one question from each unit.

Q1 Attempt all questions:

- ☒ a) What is an inline function and why is it used in C++? [3]
- ☒ b) What is a generic function, explain with example? [3]
- ☒ c) What are different derived data types in C++? [3]
- ☒ d) What is a friend function and why is it used in C++? [3]
- ☒ e) Explain C++ Garbage Collection? [3]

UNIT-I ✓

- Q2 a) Differentiate between call by value and call by reference with program code? [7.5]
- b) What are different types of operators used in C++? [7.5]

- Q3 ☒ a) Explain features of object Oriented Programming using suitable examples? [7.5]
- ☒ b) What is function overloading? Explain its usage using suitable examples? [7.5]

UNIT-II

- Q4 ☒ a) Explain the use of constructor and destructor in a class using examples? [7.5]
- ☒ b) What is dynamic memory allocation? Explain with program code? [7.5]

- Q5 a) What is operator overloading? Overload +operator to concatenate 2 strings? [7.5]
- b) Explain different types of constructors using suitable examples? [7.5]

UNIT-III

- Q6 ☒ a) Define Inheritance and explain its different types using program code? [7.5]
- ☒ b) What is pure virtual function and explain when it is used with program code? [7.5]

- Q7 a) Differentiate between composition and containership with program code? [7.5]
- b) What is run time polymorphism? Explain with program code? [7.5]

UNIT-IV

- Q8 a) Explain C++ stream classes using suitable examples? [7.5]
- b) Write a program in C++ to create generic class for stack operations? [7.5]

- Q9 ☒ a) Write a program in C++ to read content from one file and write in another? [7.5]
- ☒ b) What is the standard template library and explain iterators and vectors? [7.5]
