Unit IV

- 7. (a) List and briefly explain different file pointers available in C++.10
 - (b) Briefly illustrate different stream manipulators.5
- **8.** What do you mean by an exception? Explain the use of keywords hit, try, throw and catch. What is meant by rethrowing an exception? Explain the syntax for rethrowing an exception.

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Roll No.

18E1

B. Tech. EXAMINATION, 2022

(Fifth Semester)

(C Scheme) (Main & Re-appear)

(CSE)

CSE301C

OBJECT ORIENTED PROGRAMMING

Time: 3 Hours [Maximum Marks: 75]

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, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

- (a) Define a constructor. Write down the properties of constructors. Write down the syntax of different types of constructors available in C++.
 - (b) Explain the significance of preprocessor directives.5
- 2. (a) Explain different steps for object oriented analysis.5
 - (b) Differentiate between public and private access specifiers.
 - (c) Differentiate between structure and class.

Unit II

- (a) Explain the significance of new and delete operators. Write down the syntax of each of them.
 - (b) List the properties of static members of class. Write a program to illustrate the use of static members in class.7

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4. (a) Define a friend function. With the help of suitable program illustrate the relevance of friend function.

(b) Write a program to overload + and * operators for a class of complex numbers.

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Unit III

- 5. (a) Why inheritance is important in programming? Explain different types of inheritance in C++. Write down the syntax of each of them.
 - (b) What is the order of invoking of constructors in different types of inheritance?
 5
- 6. (a) What is a virtual function? Why is it required? What is a pure virtual function?
 - (b) With suitable examples differentiate between inheritance and composition. 5

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P.T.O.