Seat No.	

[5559]-186

S.E. (Computer) (First Semester) EXAMINATION, 2019
OBJECT ORIENTED PROGRAMMING
(2015 PATTERN)

Time : 2 Hours　　　　　　　　　　　**Maximum Marks : 50**

N.B. :— (i) Answer Q. **1** or Q. **2**, Q. **3** or Q. **4**, Q. **5** or Q. **6** and Q. **7** or Q. **8**.

　　　　(ii) Neat diagrams must be drawn wherever necessary.

　　　　(iii) Figures to the right indicate full marks.

　　　　(iv) Assume suitable data, if necessary.

SECTION I

Q1) a) What are inline functions? What are their advantages? Give an example. [6]

b) What do you mean by constructor and destructor? Write appropriate C++ program which uses copy constructor [6]

OR

Q2) a) What is Multiple Inheritance? What is the ambiguity in Multiple inheritance? Give suitable example to demonstrate Multiple inheritance [6]

b) Explain the use of explicit and mutable keywords with suitable examples [4]

c) What is abstract class? Give suitable example [2]

Q3) a) What is Friend Function? Explain with suitable example [4]

b) Compare and contrast memory allocation and deallocation using new, delete [4]

c) What is the concept of function pointers? Give suitable example in C++ [5]

OR

Q4) a) Explain class template and function template with an example [4]

b) What is Exception Handling? Explain How exception is handled in case of constructor and destructor with Example [6]

c) Why we need templates in C++? [3]

Q5) a) Write a program using the open(), eof() and getline() member functions to open and read file content line by line [6]

b) What are the various functions to manipulate the file pointers? Explain with the help of Suitable examples [7]

OR

Q6) a) What are command line arguments in C++? Write a program that returns size in bytes of a file Provided as command line argument. [10]

b) Compare between early binding and late binding [3]

Q7) **a)** Elaborate forward, bidirectional and random- access iterators with examples. [6]

b) What is a stack? How is it implemented using STL? [6]

OR

Q8) **a)** What is a container? List the container classes in C++. Explain any one of container Class using a program. [6]

b) Write a program to implement Map using STL. [6]