

Total No. of Questions—8]

[Total No. of Printed Pages—2

Seat No.	
-------------	--

[4857]-1085

S.E. (Information Technology) (First Sem.) EXAMINATION, 2015

PROBLEM SOLVING AND OBJECT ORIENTED

PROGRAMMING

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Solve Q. No. 1 or Q. No. 2, Q. No. 3 or Q. No. 4,
Q. No. 5 or Q. No. 6 and Q. No. 7 or Q. No. 8.

(ii) Neat diagrams must be drawn wherever necessary.

(iii) Figures to the right indicate full marks.

(iv) Assume suitable data, if necessary.

1. (a) Explain with diagram concept of various loop logic structure. [6]

(b) Create an algorithm and flowchart to generate Fibonacci series. [6]

Or

2. (a) What are different types of logic to solve problem ? [6]

(b) Define the terms : variable and constant, data types. [6]

3. (a) Write algorithm to partition given array. [6]

(b) Define the terms : Polymorphism, Data Encapsulation and Data Abstraction. [6]

P.T.O.

Or

4. (a) Explain table lookup techniques. [6]
(b) How memory management is carried out in C++ ? Give its syntax in C++. [6]
5. (a) Write a program in C++ to overload “+” operator for addition of 2 complex number using friend function. [6]
(b) What is inheritance ? Explain its types. [7]

Or

6. (a) What is static and dynamic binding ? [6]
(b) Write a program in C++ to demonstrate concept of Multiple Inheritance. [7]
7. (a) Write a program in C++ using I/O manipulator to print the following output for $\pi = 22/7$: [6]
3.1
3.14
3.143
3.1428
(b) Explain Container of STL in detail. [7]

Or

8. (a) What is unformatted and formatted I/O operation ? [6]
(b) What is Function template ? Explain with C++ program. [7]