Total No. of Questions—8]   [Total No. of Printed Pages—3

Seat No.

[4957]-1085

S.E. (Information Technology)

(First Semester) EXAMINATION, 2016

PROBLEMS 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,** 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*) What are different types of operator ? Give Hierarchy/Precedence

of operations.   [6]

(*b*) Explain the terms : Local variables, global variable, para-

meters.   [6]

Or

2. (*a*) Write a note on "Top Down design" to solve problem. [6]

P.T.O.

(b) Explain decision logic structure and its **3** types with the help of flowchart. [6]

3. (a) Write algorithm for finding maximum element from given array. [6]

(b) Differentiate between POP and OOP. [6]

Or

4. (a) Write algorithm for Text Line Length Adjustment. [6]

(b) What are features of object oriented programming ? Explain any *six* features in detail. [6]

5. (a) Write C++ program to demonstrate use of binary ("+") operator overloading to add two complex numbers using member function. [6]

(b) What is Polymorphism ? Explain its types in detail. [7]

Or

6. (a) What are rules for operator overloading ? [6]

(b) Explain inheritance and its types. Explain multiple inheritance in detail with syntax. [7]

7. (*a*) Write a note on Standard Template Library. [6]

(*b*) What are C++ stream classes for console operations ? Explain it in detail with the help of diagram. [7]

Or

8. (*a*) Explain put( ), write( ), getline( ) unformatted I/O operations. [6]

(*b*) How exceptions are handed in C++ ? Explain in detail. [7]