Total No. of Questions—8]   [Total No. of Printed Pages—2

Seat No.	

[5152]-175

S.E. (Information Technology) (First Semester)
EXAMINATION, 2017
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**, Q. No. **7** or Q. No. **8**.

(*ii*) Neat diagram must be drawn wherever necessary.

(*iii*) Figures to the right indicate full marks.

(*iv*) Assume suitable data, if necessary.

1. (*a*) What are the *six* steps of problem solving ?   [6]

(*b*) What are operators ? Explain different types of operators. Draw table for hierarchy of operator.   [6]

Or

2. (*a*) What are the *three* types of decision logic ? Explain with flowchart.   [6]

(*b*) Create the algorithm and the flowchart to find the average percentage (%) of all the students in a class using automatic counter loop.   [6]

P.T.O.

3. (*a*) What are table lookup techniques ? Explain any *one* table lookup technique in detail. [6]

   (*b*) Explain features of object oriented programming in detail. [6]

Or

4. (*a*) Write algorithm for keyword searching in text. [6]

   (*b*) How is memory management carried out in C++ ? Write syntax for the same. [6]

5. (*a*) Explain need of function overloading. Write C++ program to demonstrate function overloading. [6]

   (*b*) Explain multilevel inheritance with C++ program. [7]

Or

6. (*a*) What is pure virtual function ? [6]

   (*b*) What is inheritance ? Explain types of inheritance. [7]

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

   (*b*) What is use of Exception Handling in C++ ? [7]

Or

8. (*a*) Write a note on RTTI. [6]

   (*b*) How to manage console I/O operations ? [7]