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[5352]-575

S.E. (Information Technology) (First Semester) EXAMINATION, 2018
PROBLEM SOLVING AND OBJECT ORIENTED PROGRAMMING
(2015 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Solve Question Nos. Q. 1 or Q. 2, Q. 3 or Q. 4,
Q. 5 or Q. 6, Q. 7 or Q. 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 types of problems ? What are difficulties with problem solving ? [6]

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

Or

2. (a) Explain Local and global variable parameters. [6]

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

P.T.O.

3. (a) Explain features of object oriented programming in detail. [6]
(b) Explain friend function and friend class. Give syntax for same. [6]

Or

4. (a) Explain need of operator overloading. Write C++ program to demonstrate any binary operator overloading. [6]
(b) How is memory management carried out in C++? Write syntax for the same. [6]

5. (a) Explain Abstract Base Class in detail. [6]
(b) Explain multiple inheritance with C++ program. [7]

6. (a) What are virtual function and virtual destructor ? [6]
(b) How is concept of inheritance useful in object oriented programming language ? Explain types of inheritance. [7]

7. (a) Which Classes are used file stream operations ? Explain in detail. [6]
(b) Explain Exception Handling mechanism in C++ ? Explain how to catch multiple Exceptions in Program. [7]

Or

8. (a) Explain Namespaces. What are rules for namespaces ? [6]
(b) How to manage console I/O operations ? [7]