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[5252]-175

S.E (Information Technology) (I Semester) EXAMINATION, 2017

PROBLEM SOLVING AND OBJECT ORIENTED

PROGRAMMING

(2012 PATTERN)

Time : Two Hours

Maximum Marks : 50

N.B. :— (i) Solve 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 is an algorithmic and heuristic solution to a problem ? [6]

(b) What is cohesion and coupling ? Why are cohesion and coupling important to programmers ? [6]

Or

2. (a) Why is it important to maintain a naming convention within the company that is developing computer programs. [6]

(b) Create the algorithm and the flowchart to find the percentage result of all the students in a class using Automatic Counter Loop. Write pseudo code for same. [6]

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

(b) Explain need of object-oriented programming. [6]

P.T.O.

Or

4. (a) What are Table lookup techniques ? Explain any *one* Table lookup technique in detail. [6]
- (b) Explain the terms : default and constant arguments. [6]
5. (a) Explain need of function overloading. Write C++ program to demonstrate use of same. [6]
- (b) Explain pure virtual function in detail. [7]

Or

6. (a) What is Polymorphism ? What are its types ? [6]
- (b) What is inheritance ? Explain types of Inheritance. [7]
7. (a) Write a note on STL. [6]
- (b) What is Multiple Exception Handling in C++ ? Give syntax of it in C++. [7]

Or

8. (a) Explain RTTI in detail. [6]
- (b) How to manage console I/O operations ? [7]