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OLD

SIXTH SEMESTER
END SEMESTER EXAMINATION

B.Tech[CO/SE]
MAY-2018

CO/SE-312: Compiler Design

Time: 3:00 Hours

Max. Marks: 70

Note :
Attempt any five questions .
All parts of a question must be attempted together.

Q.1 Construct CLR(1) parsing table for the following grammer :   [14]
   E→T / E-T
   T→ F / *F
   F →id / (E)

Q2. a) Describe analysis and synthesis phases of Complier?   [7]

   b) Design a DFA (with input alphabet {0,1}) that accepts   [7]
   i) The set of strings which either starts with 01 or end with 01.
   ii) The set of strings containing four 1's in every string .

Q3.a i) Explain type of conflicts that occur in LR parsing with example?   [7]
   ii) Expain common prefix problem with example?
   b) Explain recursive decent parser?   [7]

Q4. a) Differentiate SDT and SDD by giving suitable examples?   [7]

   b) Write SDD for generating three address code for control flow statement.   [7]

Q5. a) Explain the different data structures for symbol table implementation and compare them?   [7]
   b) Explain the static storage allocation strategy?   [7]

Q6. a) Discuss the desirable features of error reporter?   [7]
b) Explain error recovery strategies adopted by complier?   [7]

Q7. a)Explain different representations of intermediate code?   [7]
b) Explain the following optimizingtransformations with examples:
   i) code motion   ii) loop optimization   [7]

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