

Roll No.

24488

**B. Tech. 7th Semester (CSE)
Examination – December, 2016**

COMPILER DESIGN

Paper : CSE – 405 - F

Time : Three Hours] [Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : The candidate have to attempt first compulsory question and *one* question from each of the four sections.

1. Describe the following :

20

(i) Input buffering

(ii) Parsing

(iii) LALR

(iv) Linked lists

SECTION – I

2. (i) What is compiler. Explain the different phases of compiler. 10
- (ii) Explain in detail about compiler construction tools. 10
3. Write short note on following : 20
- (i) Finite automata
- (ii) Lexical analysis
- (iii) Regular expression
- (iv) Input buffering

SECTION – II

4. Give a complete description about syntax analysis. 20
5. Describe the following : 20
- (a) Predictive parsing
- (b) Operator precedence parsing

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SECTION – III

6. Explain the following : 20
- (i) LR parser
- (ii) Canonical LR parser
7. Describe the following : 20
- (i) Construction of syntax trees
- (ii) Three address code
- (iii) Quadruples and triples

SECTION – IV

8. Give a complete description about code optimization and code generation. 20
9. What is error ? Explain in detail about lexical phase error, syntactic phase error and semantic error. 20

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