

SF - 977

Total No. of Pages :2

Seat No.	
-------------	--

T.E. (CSE) (Part - III) (Semester - VI) (Revised) (Theory)

Examination, November - 2017

COMPILER CONSTRUCTION

Sub. Code: 66858

Day and Date :Wednesday, 01 - 11 - 2017

Total Marks : 50

Time :2.30 p.m. to 4.30. p.m.

- Instructions :**
- 1) All questions are compulsory.
 - 2) Figures to the right indicate full marks.

SECTION-I

Q1) a) How to specify and recognize the Tokens. [6]

OR

List and describe different Cousins of Compiler. [6]

b) Describe Tokens Patterns and Lexeme. [4]

Q2) a) Explain the Role of Lexical analyzer. [6]

OR

What are the features of LR Parser. Write the algorithm for LR parsing. [6]

b) Explain Removing Left recursion and Left factoring of Grammar with the help of example. [4]

Q3) Write an algorithm for operator precedence parsing and explain. [5]

P.T.O.

SECTION-II

Q4) a) What are S attributed definitions? Explain with example. [6]

OR

Define Dependency Graph. Describe methods for evaluating the semantic rules. [6]

b) What are the principle sources of code optimization? [4]

Q5) a) What is basic block? Give an algorithm to convert Three Address Statements into basic blocks with example. [6]

OR

What is Backpatching? Write the SDD that uses backpatching for Intermediated code generation of Boolean expressions and Flow of control statements. [6]

b) Explain various transformations on Basic Blocks. [4]

Q6) Draw DAG for basic block: [5]

$$a = b + c$$

$$b = a - d$$

$$c = b + c$$

$$d = a - d$$

