

TCS-602

237

Printed Pages :

Paper ID & Roll No. to be filled in your Answer Book

Roll No.

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B. Tech. (VI Semester)

Examination 2015

COMPILER DESIGN

*Time: 2.00 Hours]**[Total Marks: 100*

Attempt all questions.

Q1) Attempt any four :

(4x5)

- A) What is compiler? Explain the various function of compiler.
- B) Explain BNF notations in detail.
- C) Describe Bootstrapping and its uses in compiler design.
- D) Explain LEXcompiler.
- E) What is syntax directed traslation? Explain it.
- F) Describe Error Detection in compiler design.

Q2) Attempt any four:

(4x5)

- A) Describe LR parser and its importance in compiler construction

- B) Describe tokens and lexical analysis.
- C) Explain capabilities of CFG and its use in compiler design.
- D) What is lexical phase error? Give the answer in detail.
- E) Describe importance of passes in compiler design.
- F) Explain postfix translation in syntax-directed translation.

Q3) Attempt any two:

(10x2)

- A) Describe different phases of compilation process with the help of diagram.
- B) Explain:
 - i) Cross Compiler
 - ii) YACC
- C) Explain Global Data-Flow analysis and its use in code optimization.

Q4) Attempt any two.

(10x2)

- A) Describe DAG and its special features.
- B) Explain:
 - i) Syntactic Phase Errors
 - ii) Stack allocation scheme

C) Explain:

i) Loop optimization

ii) Intermediate Code

Q5) Attempt any two.

(10x2)

A) Explain symbol table and its data structure.

B) i) What do you mean by formal grammar, explain with suitable example.

ii) Discuss the rules for finding the syntactic specification of programming languages.

C) Describe:

i) LALR parsing table

ii) SLR parsing tables

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