K18U 0095

Reg. No. : .....

Name : .....

**VI Semester B.Sc. Degree (CBCSS-Reg./Supple./Imp.) Examination, May 2018**
**CORE COURSE IN COMPUTER SCIENCE**
**6B16CSC - E04 : Compiler Design**
**(Elective) (2014 Admn. Onwards)**

Time : 3 Hours Max. Marks : 40

SECTION – A

1. **One** word answer : **(8×0.5=4)**
   a) The task of collecting the source program is sometimes entrusted to a separate program called
   b) The analysis part collects information about the source program and store in data structure called
   c) The language specification may permit some type conversions called
   d) _____ is a sequence of characters in the source program that matches the pattern for a token and is identified by the lexical analyzer.
   e) A _____ program consists of a set of procedures, one for each non terminal.
   f) _____ is recursive decent parsers needing no backtracking can be constructed for a class of grammars.
   g) _____ is based on the idea of skipping over symbols on the input until a token in a selected set of synchronizing tokens appears.
   h) _____ is the reverse of a step in a derivation.

SECTION – B

Write short notes on **any seven** of the following questions : **(7×2=14)**

2. What is lexical analysis ?
3. Write a note on semantic analysis.
4. What do you mean by Regular expression ?

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5. Define shift reducing parsing.
6. What is the important role of grammar in parse tree ?
7. What is known as parse tree ?
8. What are the conditions in predictive parsing ?
9. Why Ambiguity said in grammar is not good for a compiler construction ?
10. Explain the productions in context free grammar.

## SECTION – C

Answer **any four** of the following questions : **(4×3=12)**

11. What do you mean by hybrid compiler ? Give example.
12. Difference between code optimization and code generation.
13. Write a note on reduction. How it performs in parse tree ?
14. What are the three algorithms for constructing an LR parser ?
15. Explain in detail translation rule for grammar and semantic action.
16. What are regular definitions ? Give example.

## SECTION – D

Answer **any two** of the following questions : **(2×5=10)**

17. Explain in detail compiler construction tool.
18. What are the different types of finite automata ? Give example.
19. Explain the operations in symbol table.
20. What is the four error recovery the parser to deal with errors in code ?

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