



K20U 0101

Reg. No. : .....

Name : .....

VI Semester B.Sc. Degree (CBCSS-Reg./Supple./Improv.)  
Examination, April 2020  
(2014 Admission Onwards)  
CORE COURSE IN COMPUTER SCIENCE  
6B16CSC – E04 : Compiler Design

Time : 3 Hours

Max. Marks : 40

SECTION – A

1. One word answer.

(8×.5=4)

- The input program to a compiler is called \_\_\_\_\_.
- An optional phase in compilers designed to improve the intermediate code is \_\_\_\_\_.
- The basic symbol of a grammar is known as \_\_\_\_\_.
- To construct the canonical (RCO) collection for a grammar we define \_\_\_\_\_ besides two functions.
- \_\_\_\_\_ errors are detected both at compile time and at run time.
- A deletion error is an example of a \_\_\_\_\_ error.
- A graphical representation for derivations is called a \_\_\_\_\_.
- A data structure that is slow but simple to implement a symbol table is \_\_\_\_\_.

SECTION – B

Write short notes on **any seven** of the following questions :

(7×2=14)

- What is lexical analysis ?
- What is local optimization ?
- What is a regular expression ?
- What are parse trees ?
- Discuss the problems with top down backtracking parsers.
- What is an LR parser ?

P.T.O.



- 8. What are hash tables ?
- 9. What are lexical errors ?
- 10. What are transition tables ?
- 11. Define deterministic finite automaton.

**SECTION – C**

Answer **any four** of the following questions :

(4x3=12)

- 12. Explain handles.
- 13. What are compiler writing tools ?
- 14. Explain intermediate code generation.
- 15. Discuss about syntax analysis.
- 16. Explain about nondeterministic finite automation.
- 17. Explain Handle pruning.

**SECTION – D**

Answer **any two** of the following questions :

(2x5=10)

- 18. Explain stack implementation of shift reduce parsing.
- 19. Discuss about data structures used to implement symbol table.
- 20. Explain about different types of optimization.
- 21. Explain about the different types of errors.