K19U 0096

Reg. No. : Name :

> VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Improv.) Examination, April 2019 (2014 Admission Onwards)

CORE COURSE IN COMPUTER SCIENCE 6B16CSC-E04 : Compiler Design Time: 3 Hours Max. Marks: 40 SECTION - A concesso soubstitute site of the concessor of One word answer: 1. a) A source programs needs to be _ before being translated to an object program. b) Tools used to construct compilers are commonly called _____ d) A grammar for which the parsing table has uniquely defined entries is called e) Symbol table is a linear array of _____ f) A misspelled keyword is a ______ type of error. g) A parsing strategy used in top down parsing is ___ h) Predictive parsing does not suffer from _ Answer any two of the following questions SECTION - B Write short notes on any seven of the following questions:

- 2. What is a compiler?
- 3. What is intermediate code?
- 4. What is a regular expression?

20. How can we design a lexical analyzer ?

K19U 0096

- 5. What is context free grammars?
- 6. What is a handle?
- 7. Define LR grammar.
- 8. What is a symbol table?
- 9. What are syntactic errors?
- 10. What is the role of search trees for symbol table organization?
- 11. What is shift-reduce parsing?

SECTION - C

Answer any four of the following questions:

 $(4 \times 3 = 12)$

- 12. Explain about finite automata.
- 13. Explain loop optimization.
- 14. What are compiler-compilers?
- 15. What is predictive parsing?
- 16. Write notes on shorthands.
- 17. What are parse trees? How is it represented?

SECTION - D

Answer any two of the following questions:

 $(2 \times 5 = 10)$

- 18. Explain top down parsing.
- 19. Discuss about data structures used to represent symbol tables.
- 20. How can we design a lexical analyzer?
- 21. Explain the phases of a compiler.