K22U 0382

Reg. No. :

VI Semester B.Sc. Degree (CBCSS – OBE – Regular) Examination, April 2022 (2019 Admission) CORE COURSE IN COMPUTER SCIENCE 6B13CSC: Compiler Design

Time: 3 Hours

Max. Marks: 40

PART – A Short Answer

Answer all questions.

 $(6 \times 1 = 6)$

- 1. Define compiler.
- 2. What is the role of a preprocessor?
- 3. Define parse tree.
- 4. Define NFA.
- 5. What are the different types of errors?
- 6. Define instruction cost.

PART – B Short Essay

Answer any 6 questions.

 $(6 \times 2 = 12)$

- 7. What is syntax error? Give an example.
- 8. Define tokens and patterns.
- 9. Define transition diagrams.
- 10. What are the error recovery strategies of a parser for syntax errors?

K22U 0382



- 11. Describe any two compiler construction tools.
- 12. Define ambiguous grammar. Give an example.
- 13. Define peephole optimization technique.
- 14. List the structure preserving transformations.

PART – C Essay

Answer any 4 questions.

 $(4 \times 3 = 12)$

- 15. Explain the phases of analyzing a source program.
- 16. What are the generic issues to be considered in the design of code generators?
- 17. Explain the role of a parser in compiler.
- 18. Define symbol table. Give its structure.
- 19. Write a note on Intermediate languages.
- 20. What do you mean by the analysis-Synthesis Model of Compilation?

PART – D Long Essay

Answer any 2 questions.

 $(2 \times 5 = 10)$

- 21. Explain the phases of a compiler with an example.
- 22. Explain the lexical analyzer.
- 23. Explain different types of parsing.
- 24. Explain code optimization.