D 90990

Name.......................................

Reg. No.................................

THIRD SEMESTER M.A./M.Sc./M.Com. DEGREE (REGULAR) EXAMINATION, NOVEMBER 2020

(CBCSS)

Computer Science

CSS 3C 13—PRINCIPLES OF COMPILERS

(2019 Admissions)

Time : Three Hours

Maximum : 30 Weightage

General Instructions

1. *In cases where choices are provided, students can attend all questions in each Section/Part.*
2. *The minimum number of questions to be attended from the Section/Part shall remain same.*
3. *There will be an overall ceiling for each Section/Part that is equivalent to maximum weightage of the Section/Part.*

Section A

*Answer any **four** questions.*
Each question carries 2 weightage.

1. Briefly explain about Interpreter.

2. What are the commonly used buffering methods ?

3. Define Parser.

4. What is the significance of intermediate code ?

5. Define Symbol table.

6. Mention the techniques in loop optimization.

7. What is Cross - Compiler ?

(4 × 2 = 8 weightage)

Section B

*Answer any **four** questions.*
Each question carries 3 weightage.

8. What are the issues in lexical analysis ?

9. How can you convert the 'Case Statements' into intermediate code ? Give example.

Turn over

10. Explain the sequence of stack allocation processes for a function call.

11. Illustrate optimization basic blocks with examples.

12. Write detailed notes on parameter parsing.

13. Describe about region based analysis.

14. Write a note on shift reduce parsing.

(4 × 3 = 12 weightage)

Section C

Answer any **two** *questions.*
Each question carries 5 weightage.

15. Explain with an example conversion of NFA to DFA.

16. Write in detail about Predictive parsing and Bottom up parsing.

17. Explain about flow graphs with suitable example.

18. Give a detailed note on Storage allocation strategies.

(2 × 5 = 10 weightage)