**24P361** (Pages: 2) Name: .....

Reg.No: .....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025**

(CBCSS - PG)

(Regular/Supplementary/Improvement)

**CC19PCSS3C13 - PRINCIPLES OF COMPILERS**

(Computer Science)

(2019 Admission onwards)

Time : 3 Hours Maximum : 30 Weightage

**Part-A**

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

1. Explain conversion of NFA to DFA.
2. Illustrate the role of parser.
3. Explain conflicts during Shift-Reduce Parsing.
4. Describe Type expressions.
5. Explain the manual de allocation strategies.
6. Explain Loop optimization.
7. Explain Data flow schemas on basic blocks.

**(4 × 2 = 8 Weightage)**

**Part-B**

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

8. Explain applications of compiler technology.
9. Illustrate about derivations and parse tree.
10. Explain about Top Down parsing.
11. Describe Control Flow.
12. Describe stack allocation of space.
13. Explain access to non local data on the stack.
14. Explain stack allocation.

**(4 × 3 = 12 Weightage)**

**Part-C**

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

15. Discuss about phases of compiler.

16. Examine whether the below grammar is LL(1) or not? S → ACB / CbB / Ba A → da / BC B → g / ∈ C → h / ∈

17. Explain DAG, Static Simple Assignment form.

18. Explain issues in the design of a code generator.

**(2 × 5 = 10 Weightage)**

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