

23P337

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Name: .....

Reg.No: .....

**THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024**

(CBCSS - PG)

(Regular/Supplementary/Improvement)

**CC19P CSS3 C13 - 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. Discuss about language translator.
2. Discuss Derivations.
3. Discuss the significance of LR parsers.
4. Describe BREAK CONTINUE and GOTO statement.
5. Explain data access without nested procedures.
6. Explain Target machine model.
7. Explain Transfer functions.

**(4 × 2 = 8 Weightage)**

**Part-B**

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

8. Explain role of lexical analyser.
9. Explain about error handling and recovery.
10. Discuss about recursive predictive parsing.
11. Describe Three Address Code Statements.
12. Describe the static versus dynamic storage allocation.
13. Illustrate how to reduce fragmentation.
14. Explain: (i) Copy propagation (ii) Dead code elimination (iii) Code motion.

**(4 × 3 = 12 Weightage)**

**Part-C**

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

15. Explain recognition of tokens using finite automata.

16. Examine whether the below grammar is LL(1) or not?  
 $S \rightarrow ACB / CbB / Ba$   $A \rightarrow da / BC$   $B \rightarrow g / \epsilon$   $C \rightarrow h / \epsilon$
17. Explain types and declarations.
18. Discuss stack allocation in code generation.

**(2 × 5 = 10 Weightage)**

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