

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****1154 B.Tech. CBCS****Sub. Name: System Programming and Compiler Construction****Sub. Code: 94357****Day and Date: Tuesday ,16-12-2025****Total Marks: 70****Time: 10:30 AM To 01:00 PM****Instructions:**

- Special Inst.:**
- 1. Question no. 6 is compulsory**
 - 2. Solve any four questions from Q. No. 1 to Q. No.5**
 - 3. Assume suitable data wherever necessary**
 - 4. Figures to the right indicate full marks**

- Q1)** Answer the following questions **[15]**
- a. Explain the Language Processing Activities **[8]**
 - b. Write down difference between compiler interpreter and Assembler **[7]**
- Q2)** Answer the following questions **[15]**
- a. What is Role of a Lexical analyzer. **[8]**
 - b. What is a pass structure in an assembler? Explain the purpose of multiple passes. **[7]**
- Q3)** Answer the following questions **[15]**
- a. What is compiler? Explain Phases of a compiler in detail **[8]**
 - b. How is input buffering implemented in a compiler? What are the different types? **[7]**
- Q4)** Answer the following questions **[15]**
- a. Write short notes on **[8]**
 1. Bottom Up Parsing
 2. Top Down Parsing
 - b. What is parsing. Explain Types of Parsing in detail **[7]**
- Q5)** Answer the following questions **[15]**
- a. Define syntax-directed definition in the context of compiler construction **[8]**

b. Explain techniques of code Optimization

[7]

Q6) Write short note on(Any 2)

[15]

a. Backpatching

[5]

b. Peephole optimization

[5]

c. Role of Parser

[5]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

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