

Seat No. **MAR\_APR 2025 SUMMER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: System Programming****Sub. Code: 66294/80795/81034****Day and Date: MAY ,06-05-2025****Total Marks: 70****Time: 02:30 PM To 05:00 PM**

- Instructions:**
1. All questions are compulsory
  2. Assume suitable data wherever necessary and mention it boldly
  3. Figures to the right indicate full marks

- Q1)** Solve any two of the following (7 Marks Each) [14]
- a. Explain fundamental of language specification [7]
  - b. What is meant by intermediate representation of program? Explain in detail. [7]
  - c. Discuss Language processing activities in detail [7]
- Q2)** Solve any two of the following (7 Marks Each) [14]
- a. Explain assembly language statement with example. [7]
  - b. What are data structure use in Pass I of Assembler? [7]
  - c. Compare between variant I and variant II of intermediate code [7]
- Q3)** Solve any two of the following (7 Marks Each) [14]
- a. State and discuss advance micro facilities with example each. [7]
  - b. Discuss in details, with block diagram the design of macro preprocessor? [7]
  - c. Explain nested macro call with example [7]
- Q4)** Solve any two of the following (7 Marks Each) [14]
- a. Explain Code Optimization [7]
  - b. Discuss in detail with example, Triples and Quadruples [7]
  - c. Write a note on: [7]
    - i) Memory allocation and deallocation
    - ii) Different between static and Dynamic memory
- Q5)** Solve any two of the following (7 Marks Each) [14]

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|-----------|---|------------|
| <b>a.</b> | Write and Explain Linking algorithm               | <b>[7]</b> |
| <b>b.</b> | Explain Software Tools for Program Development    | <b>[7]</b> |
| <b>c.</b> | Explain design of an editor with suitable diagram | <b>[7]</b> |

## **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.

- 1] (1154) B.Tech. CBCS (80795) System Programming Part 3 SEM 5
- 2] (101) Bachelor of Engineering (66294) System Programming Part 3 SEM 5
- 3] (101) Bachelor of Engineering (81034) System Programming Part 3 SEM 5