

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****1154 B.Tech. CBCS****Sub. Name: Operating System - II****Sub. Code: 81547/81824****Day and Date: Saturday ,13-12-2025****Total Marks: 70****Time: 10:30 AM To 01:00 PM****Instructions: 1. All questions are compulsory
2. Figures to the right indicate full marks**

- Q1) Solve any two [14]**
- Explain with example: Building block primitives. [7]
 - What is a buffer? Explain the structure of the buffer header. [7]
 - Write and explain Releasing a buffer (brelse) [7]
- Q2) Solve any two [14]**
- Draw and explain the structure of the Regular file. [7]
 - What is a Super block? List and explain fields of super block. [7]
 - Write and explain iget algorithm [7]
- Q3) Solve any two [14]**
- Explain read() system call with example [7]
 - Write short note change directory and change root. [7]
 - What is context switch? Explain steps for context switch. [7]
- Q4) Solve any two [14]**
- Draw and explain complete Process state transition diagram. [7]
 - Discuss mapping between per process region table and page table. [7]
 - What is the use of fork() system call? Explain the sequence of operations kernel executes for fork. [7]
- Q5) Solve any two [14]**

- a. Explain simple process scheduling algorithm with example. [7]
- b. Explain page fault. Explain handling of validity page fault. [7]
- c. Explain working of page stealer process [7]

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] (101) Bachelor of Engineering (81824) Operating System - II Part 3 SEM 6

2] (1154) B.Tech. CBCS (81547) Operating System - II Part 3 SEM 6