

RAN-2511000902030002 / 2411000902030001
First Year Bachelor of Computer Applications (NCF-NEP) (Sem. - II)
Examination September - 2025
Minor - 203 - Operating System
Time: 2 Hours]
[Total Marks: 50
સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book.
- (2) Write to the point
- (3) Provide examples and diagrams wherever appropriate / necessary
- (4) Figures to the right indicate full marks to the question

Seat No.:

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Student's Signature

Q. 1. A. Choose the correct option (Any Five)
(05)

1. _____ uses master-slave relationship.

A. Real Time Systems	B. Distributed Systems
C. Asymmetric multiprocessing	D. Symmetric multiprocessing
2. Which of the following operating system runs on the server?

A. Batch OS	B. Distributed OS
C. Real-time OS	D. Network OS
3. Where Boot Block Locate on Hard Disk?

A. First location of Hard Disk	B. First Location of Operating System
C. End Location of Hard Disk	D. Anywhere on the disk
4. Which one of the following is not the distribution of Linux?

A. Arch	B. CentOS
C. Fedora	D. None of the these
5. Applications communicate with kernel by using

A. System Calls	B. C Programs
C. Shell Script	D. Shell
6. Which are the two types of device files?

A. Character & Block	B. Character & Socket
C. Block & FIFO	D. Input & output
7. What will happen in the single level directory?

A. All files are contained in different directories all at the same level
B. All files are contained in the same directory
C. Depends on the operating system
D. None of the mentioned

Q. 1. B. Answer the following in short. (Any Five)
(05)

1. What is the primary function of an Operating System?
2. Explain real time operating system.
3. What is file? List out file types.
4. Explain the role of kernel in Linux.
5. What is boot block?
6. Define operating system.

- Q. 2. A.** 1. Explain Real-Time Operating System. (10)
2. Explain all file access method in detail.
- OR**
- Q. 2. A.** 1. Explain batch operating system with its drawback and its solution. (10)
2. Explain file management function of an Operating System.
- Q. 2. B.** 1. Discuss Need of an Operating System (06)
2. Write a note on Tree-structured directories.
- OR**
- Q. 2. B.** 1. What do you mean by multitasking? Give the name of operating system having this feature. (06)
2. Explain different operation performed on directory.
- Q. 3. A.** 1. Explain features of Linux Operating System. (10)
2. Explain system configuration service of Linux.
- OR**
- Q. 3. A.** 1. Write a note on Linux Operating System. (10)
2. Discuss various ways to manage user account in Linux.
- Q. 3. B.** 1. Write a short note on components of Linux. (06)
2. Write a short note on RAID.
- OR**
- Q. 3. B.** 1. What is significance of device controller? (06)
2. Explain Device driver.
- Q. 4.** Suppose a disk drive has 200 cylinders number from 0 to 199. Drive is currently served the request at cylinder no 68. The queue for pending request in FIFO order is as follows: (08)
22 40 26 127 140 175 43 88 62 131 112 91
Show the disk scheduling for the following algorithm
I) C-LOOK II) SCAN
III) SSTF IV) C-SCAN
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