

Roll No. 241001261027

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**MCA 1st Semester
(Regular/Re-appear/Improvement)
Examination – December, 2024**

MODERN OPERATING SYSTEM WITH UNIX

Paper : MCA-2102

Time : Three Hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt ***five*** questions in all, selecting ***one*** question from each Unit. Question No. 1 is ***compulsory***. All questions carry equal marks.

1. Write short notes on the following :

- (a) UNIX operating system
- (b) Swapping
- (c) Deadlock detection
- (d) Standard error
- (e) Splitting files

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- (f) Block and fragments
- (g) C-Shell
- (h) Function of system manager

UNIT - I

2. What do you mean by Operating System ? Differentiate between multiprogramming and Time sharing Operating System.
3. Explain the concept of demand paging and virtual memory.

UNIT - II

4. Discuss deadlocks. Also explain different methods of handling the deadlocks.
5. Explain files and directories in detail.

UNIT - III

6. Discuss different operations on file.
7. Focus on UNIX editor vi. Also discuss three modes of vi editor in UNIX.

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UNIT - IV

8. Explain interactive shell scripts and their different uses.
9. Write notes on the following :
 - (a) AWK utility
 - (b) System administration

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