

**A-1300**

Total Pages : 3

Roll No. ....

**MCS-504/MIT(CS)-304**

**OPERATING SYSTEM/INTRODUCTION  
TO OPERATING SYSTEM**

Examination February, 2026

Time : 2:00 Hrs.

Max. Marks : 70

*Note :-* This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

**Section-A**

**Long Answer Type Questions** (2×19=38)

*Note :-* Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

**A-1300**

( 1 )

P.T.O.

1. What is a process ? Explain about various fields of Process Control Block.
2. What is a System call ? Explain the various types of system calls provided by an operating system.
3. What do you mean by security ? Discuss in brief access control list.
4. What is Deadlock ? List the conditions that lead to deadlock. How Deadlock can be prevented ?
5. Explain different types of OS and also explain different types of tasks done by OS.

### **Section–B**

#### **Short Answer Type Questions (4×8=32)**

**Note** :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Explain the concept of system call.
2. Explain how inter-process communication can be done in UNIX.
3. Explain the structure of microkernel based operating system.

4. Define file system. Explain file operations in detail.
5. Discuss various features of Unix Operating System.
6. Differentiate between multi-tasking and multi-programming.
7. Explain the difference between internal and external fragmentation.
8. Differentiate between pre-emptive and non-pre-emptive scheduling.

\*\*\*\*\*