

BT-5/D-21**45004****OPERATING SYSTEM****Option-II****Paper-CSE-307**

Time Allowed : 3 Hours]

[Maximum Marks : 75

Note : Attempt **five** questions in all, selecting at least **one** question from each Unit. All questions carry equal marks.

UNIT-I

1. (a) Explain the characteristics of Operating systems. 8
- (b) Write a short note on threading. 7
2. (a) Discuss directory and file protection mechanisms. 8
- (b) Explain round robin CPU scheduling with the help of a suitable example. 7

UNIT-II

3. (a) Differentiate between segmentation and fragmentation. 8
- (b) Explain the concept of demand paging. 7
4. (a) Write a short note on device management. 8
- (b) Explain the Thrashing. 7

UNIT-III

5. (a) Explain the four necessary conditions for a deadlock to occur. 8
- (b) Discuss the deadlock prevention. 7
6. (a) What is meant by critical section problem? 8
- (b) Write a short note on inter-process communications. 7

UNIT-IV

7. Explain the file system and interrupt mechanism of DOS. 15
8. Explain the Storage management and file system of UNIX. 15