BCA/D-17 OPERATING SYSTEM-I Paper: BCA-352

Time: Three Hours Maximum Marks: 80

Note: Attempt five questions in all, selecting at least one question from each Unit. Q. No. 1 is compulsory.

Compulsory Question

- 1. (a) Define an Operating System.
 - (b) What do you mean by Buffering?
 - (c) Expand the following abbreviations: FCFS, SJP,FIFO, DRU.
 - (d) Define the term Scheduling.
 - (e) What is a page in paged memory management system?
 - (f) What is 'Safe State' regarding Deadlock Avoidance?
 - (g) What do you mean by a file?
 - (h) What is Thrashing?

Unit-I

- 2. Discuss the various functions performed by an Operating System.
- 3. Explain Multiprogramming Operating System in detail.

Unit-II

- 4. (a) Introduce the term process.
 - (b) Explain the various process state and their transitions.
- 5. (a) Discuss SJF Scheduling.
 - (b) Discuss Priority Scheduling.

Unit-III

- 6. Explain Deadlock Detection and Recovery.
- 7. Write explanatory note on Segmentation.

Unit-IV

- 8. Write the FIFO and LRU Page Replacement Algorithms.
- 9. Discuss the various file types and file attributes.