# BCA/D 16 OPERATING SYSTEM PAPER-BCA-352

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

### Compulsory Question:

- 1. (a) Differentiate Real Time and Distributed OS.
  - (b) Define Swapping.
  - (c) Define Single User and Multi-user OS. Give two examples of each.
  - (d) What is Round-Robin fashion? Discuss its role.

#### Unit-I

- 2. Explain various Management functions performed by operating system.
- 3. (a) Explain concept of system calls.
  - (b) Discuss Time-sharing, Serial and Multiprogramming OS.

#### Unit-II

- 4. Explain Processor scheduling and Multiple processor scheduling.
- 5. (a) Define Deadlock and Deadlock avoidance
  - (b) Define Process state and PCB.

#### Unit-III

- 6. Explain critical section problem and discuss with two examples usage of Semaphores.
- 7. Explain Paging and Page-Replacement Aglorithms.

## Unit-IV

- 8. (a) Explain file allocation methods.
  - (b) Discuss DIRECTORY and various DIR structures.
- 9. Write short notes on the following:
  - (a) Disk Scheduling.
  - (b) Interprocess Communication.