

BCA / D-18
OPERATING SYSTEM-I
Paper-BCA-352

Time allowed : 3 hours]

[Maximum marks : 80

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

Compulsory Question

1. (a) Define Real Time Operating System.
- (b) What do you mean by Spooling ?
- (c) Differentiate between a Program and a Process.
- (d) What is a Thread ?
- (e) Define the term 'Swapping'.
- (f) What do you understand by the term 'Deadlock' ?
- (g) What do you mean by file encryption ?
- (h) Briefly introduce Computer Virus ? 8×2=16

Unit-I

2. (a) What do you mean by an Operating System ? Give some examples of Operating System. 4, 2
- (b) Explain Operating System as a Manager of Resources. 10
3. Explain Multiprocessing Operating System in detail. 16

Unit-II

4. (a) Write a note on Process Control Block. 8
- (b) Discuss the various Operations on Processes. 8
5. Explain Multi-level feedback Queue Scheduling. 16

Unit-III

6. (a) What do you mean by Safe & Unsafe States regarding Deadlocks ? 3,3
- (b) Write down the Bankers Algorithm. 10
7. Explain the concept of Paging in detail. 16

Unit-IV

8. Discuss Demand Paging in detail. 16
9. Discuss the various file protection techniques. 16