

Roll No.

Printed Pages : 2

1203

BCA / D-19
OPERATING SYSTEM
Paper-BCA-352

Time allowed : 3 hours]

[Maximum marks : 80

Note : Attempt any five questions. Select one from each unit.
Q. No. 1 is compulsory.

1. (a) Differentiate Multiprogramming versus multiprocessing.
(b) Abbreviate
FCFS, SJF, LRU, ISM
(c) Differentiate Internal and External fragmentation.
(d) Name 4 Types of file. 4×4=16

Unit-I

2. Define operating system and its types. Differentiate Single user and Multi-user operating systems. 16
3. Write note on :
 - (a) Batch Processing
 - (b) System Call
 - (c) Device Manipulation
 - (d) Time Sharing 16

Unit-II

4. (a) Define Process and PCB
(b) Discuss Scheduler and context switch
(c) Define Process Termination
(d) What is Threading ? 16

(2)

5. Define Pre-emptive and Non-pre-emptive Scheduling. Explain CPU Scheduling algorithms.

Unit-III

6. Define Segmentation. Explain Hardware implementation Segmentation. Write its advantages.
7. Explain concept of Deadlock, its detection and avoidance of Deadlock. 16

Unit-IV

8. Define Demand Paging, Explain LRU and optimal page replacement algorithms. 16
9. Write note on :
 - (a) Naming a file and its attributes with 4 operations.
 - (b) File Recovery and Protection. 16