

Roll No. :

Total No. of Pages : 4

BCA-203

BCA SECOND YEAR EXAMINATION, 2023 FUNDAMENTALS OF OPERATING SYSTEM

(Paper - III)

Time Allowed : Three Hours

Maximum Marks : 100

PART-A [Marks : 20]

Note: Answer all questions (50 words each). All questions carry equal marks.

PART-B [Marks : 50]

Note: Answer five questions (250 words each). Selecting one from each unit. All questions carry equal marks.

PART-C

Note: Answer any two questions (300 words each). All questions carry equal marks.

PART-A [Marks : 30]

1. Answer the following questions :

(i) Define System COQ.

BCA203

(1)

P.T.O.

- (ii) What is Clustered System ?
- (iii) Define Process.
- (iv) Define Scheduling.
- (v) What is Shared Resource ?
- (vi) What is need of Synchronization ?
- (vii) Define Swapping.
- (viii) Define Thrashing.
- (ix) Define Kernel.
- (x) Give two main features of Linux.

PART-B

UNIT-I

2. Discuss various functions of Operating System.

3. Write short note on Virtual Machine.

UNIT-II

4. Explain Inter process Communication.

5. Discuss Scheduling Criteria.

UNIT-III

6. Define Deadlock. Discuss necessary conditions of Deadlock.
7. Write short note on Semaphore

UNIT-IV

8. Explain Segmentation.
9. Explain Paging.

UNIT-V

10. Discuss File System in Linux.
11. Discuss Memory Management in Linux.

PART-C

12. Discuss the following :
 - (a) System Programs
 - (b) Mainframe System
13. Discuss various types of Schedulers.
14. Discuss various methods for Deadlock Handling.
15. Explain Segmentation with Paging.

16. Discuss various Design Principles of Linux.

6. Define Deadlock. Discuss necessary conditions of Deadlock.

7. Write short note on Semaphore.

UNIT-IV

8. Explain Segmentation.

9. Explain Paging.

UNIT-V

10. Discuss File System in Linux.

11. Discuss Memory Management in Linux.

PART-C

12. Discuss the following:

(a) System Programs

(b) Maintenance System

13. Discuss various types of Scheduler.

14. Discuss various methods of Deadlock Handling.

15. Explain Segmentation with Paging.

~