Register No.:

832

April 2023

Time – Three hours
(Maximum Marks: 100)

N.B.
1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.

PART – A

1. Why process management is important in operating system?
2. List the different types of system call.
3. Draw the process state transitions.
4. What are the models used for performance evaluation of scheduling algorithm?
5. List the types of page replacement algorithms.
6. Define protection and sharing.
7. List any six file attributes.
8. What is encryption and auditing?
9. List the sub systems in Linux.
10. What is user and group management?

[Turn over.....

PART – B

11. (a) (i) Explain any two mobile operating systems with example. (7)
(ii) Explain process management component. (7)

(Or)

(b) (i) Briefly explain I/O management and Network management. (7)
(ii) Explain any three types of operating system structures. (7)

12. (a) (i) Describe threads. (7)
(ii) Discuss deadlocks detection and recovery. (7)

(Or)

(b) (i) Explain shared memory system with example. (7)
(ii) Explain any two scheduling criteria. (7)

13. (a) With neat diagram, explain hardware support for paging.

(Or)

(b) (i) Discuss the basic concept of virtual memory. (7)
(ii) Explain internal fragmentation. (7)

14. (a) Explain different file operations.

(Or)

(b) Discuss security policies and mechanisms.

15. (a) Explain ext2 file system with an example.

(Or)

(b) Explain the components and architecture of Linux system.
