406200090001

NOVEMBER/DECEMBER 2022

CCA52/CCS52/CSC52 — OPERATING SYSTEM

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions

1. Define the term — Operating System.

2. Mention the types of Operating Systems.

3. What is Critical Section problem?

4. Define the term — Deadlock.

5. Define the term — Fragmentation in memory management.

6. What is Demand-paging memory management technique?

7. What is meant by Free space management?

8. Define the term — RAID.

9. What is UNIX?

10. Define the term — Kernel in UNIX.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Describe about I/O and Storage structures.

Or

(b) Explain the concept of Process.

12. (a) Discuss on the concept of Semaphores.

Or

(b) Describe about the Deadlock detection and prevention methods.

13. (a) Explain the working of Paging memory management technique.

Or

(b) Discuss on the functioning of Segmentation memory management technique.

14. (a) Describe about the Allocation methods in File system implementation.

Or

(b) Explain any two Disk Scheduling algorithms.

15. (a) Discuss on Process management in LINUX OS.

Or

(b) Describe about the working of File Systems in LINUX OS.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss on System calls and System programs.

17. Describe about the CPU Scheduling algorithms.

18. Explain the Page replacement algorithms in Virtual memory.

19. Discuss on the concept of Files and Access methods.

20. Describe about the Memory management technique in LINUX OS.
