

18. Explain in detail about evolution of round robin multi-programming performance.
19. List the various types of devices to be managed by OS.
20. Give a brief account of Logical File System.

S.No. 5251

**RCCS 10 CS 7/RCCS 10 IT 7/
RCCS 10 SD 7**

(For candidates admitted from 2010 to 2015 batch)

B.Sc. DEGREE EXAMINATION, APRIL, 2022.

**Part III — Computer Science/Information Technology —
Major**

OPERATING SYSTEMS

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions.

1. What is operating system?
2. What is meant by Time-sharing Systems?
3. Name the four common memory management techniques in OS.
4. How swapping is done in OS?
5. Why does the OS need to manage the processor?
6. What are the two types operations in semaphores?
7. Define the I/O Scheduler.

8. Write any two advantages of I/O device handler.
9. What is meant by file operating system?
10. What file system does Unix use?

SECTION B — ($5 \times 5 = 25$)

Answer ALL questions, choosing either (a) or (b).

11. (a) Describe the evolution of operating systems.

Or

- (b) Explain the features of Batch Processing and multiprocessing.

12. (a) Discuss about the Single contiguous Allocation in Memory Management.

Or

- (b) Write the short note on Demand paged memory management.

13. (a) Explain about the Job scheduling with suitable example.

Or

- (b) What is deadlock? Explain in detail about Banker's algorithm.

14. (a) Define the I/O Traffic in device management with suitable example.

Or

- (b) What is spooling in operating system? Explain in detail.

15. (a) List and explain about the simple file system in file management.

Or

- (b) What are the different models of a file system?

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Discuss the I/O Programming Concepts in operating system.

17. Elaborate the Partitioned and Relocatable allocations in memory management