

NOVEMBER/DECEMBER 2020

BCS52 — OPERATING SYSTEM

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define the term – Operating system.
2. What is Process Management?
3. What is Priority Scheduling in CPU Scheduling?
4. Define the term – Deadlock.
5. What is Main memory?
6. Distinguish between Pages and Frames in memory management.
7. Define the term – Swapping.
8. What is Virtual memory?
9. Define the term – File system.
10. What is meant by File protection?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Discuss on the services of Operating System.

Or

- (b) Explain briefly the Classification of Operating System.

12. (a) Describe the basics of CPU Scheduling and Scheduling criteria.

Or

- (b) Discuss on Deadlock avoidance procedure.

13. (a) Explain the basics of Memory-address binding, Logical and Physical address space.

Or

- (b) Describe the concept of Memory allocation and Protection.

14. (a) Discuss on Segmentation in memory management.

Or

- (b) Explain the Paging memory management technique.

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

Or

- (b) Discuss on Disk Scheduling algorithms.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe the Process concept, its states, and process control block.
17. Explain the FCFS, SJF and Round-robin Scheduling algorithms.
18. Discuss on Memory Partitioning, Fragmentation and Compaction.
19. Describe the Page Replacement algorithms in Demand paging.
20. Explain the Directory structure in File management.
