

[21-BS425-B]

AT THE END OF FOURTH SEMESTER – (CBCS PATTERN)

COMPUTER SCIENCE – IV (B) – OPERATING SYSTEMS

U.G. PROGRAM (4 YEARS HONORS)

(w.e.f. Admitted Batch of 2020-21)

Time: 3 Hours

Max. Marks: 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Explain about operating system as resource abstraction.
2. Explain the System call.
3. What is Deadlock? What are the necessary conditions to occur a deadlock?
4. Write a note on demand paging.
5. Explain about Security Policy Management.
6. Explain the importance of Real-Time Embedded systems.
7. Explain CPU scheduling concepts.
8. What is critical section problem?

SECTION B — (5 × 10 = 50 marks)

Answer ALL the questions.

9. (a) What is Operating system? Explain different basic functions of operating system.

Or

- (b) Explain the time-shared operating system.

10. (a) What is process? Explain the process Scheduling.

Or

- (b) Write a detailed note on Thread Issues.

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11. (a) Explain about critical section problem of process synchronization.

Or

(b) What is Banker's algorithm? How dead lock can be avoided with it?

12. (a) What is paging? Explain the structure of page table in detail.

Or

(b) What is virtual memory? Explain the strategies of Fixed and variable partitions.

13. (a) Write about different file allocation methods.

Or

(b) Explain about Android process management and file system.
