



K23U 2298

Reg. No. :

Name :

V Semester B.C.A. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2023
(2019 – 2021 Admissions)
Core Course
5B12BCA – OPERATING SYSTEMS

Time : 3 Hours

Max. Marks : 40

SECTION – A
(Short Answer)

Answer **all** questions.

(6×1=6)

1. What are the advantages of multiprogramming ?
2. Differentiate between system programs and application programs.
3. What is the purpose of CPU scheduler ?
4. Define deadlock.
5. What is sector sparing ?
6. List the various file attributes.

SECTION – B
(Short Essay)

Answer **any 6** questions.

(6×2=12)

7. What is the use of system calls ?
8. Which are the states of a process ?
9. Write a note on scheduling queues.
10. What is meant by memory protection ?

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11. What is the use of TLB ?
12. Briefly explain the SCAN algorithm for disk scheduling.
13. What are the procedures that I/O subsystem supervises ?
14. Write short note on interrupts.

**SECTION – C
(Essay)**

Answer **any 4** questions.

(4×3=12)

15. What are the operating system services that are helpful to the user ?
16. How to create a process ? Explain.
17. Differentiate between internal and external fragmentation with example.
18. Briefly explain disk management.
19. Differentiate between non-blocking and asynchronous I/O.
20. Write a note on I/O Scheduling.

**SECTION – D
(Long Essay)**

Answer **any 2** questions.

(2×5=10)

21. Explain any three operating system structures.
 22. Explain about deadlock recovery mechanisms.
 23. How demand paging is implemented in virtual memory system ? Explain.
 24. Explain different file allocation methods in detail.
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