



Mavin

Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test- I August 2024
Semester III

Class: II UG
Major: Computer Applications

Time: 2 Hrs
Maximum Marks:60

23BCAC05 Operating Systems

Course Outcomes:

1. Recall the concepts of file management.
2. Apply security aspects in appropriate situations.
3. Apply knowledge gained through processor scheduling to other applications.
4. Analyze features and limitations of operating systems.
5. Explore various other operating systems.

Part-A

Choose the correct answer

6x1=6

1. An Operating system is a CO1K1
 - a. A hardware device
 - b. A Software
 - c. A program that operates the hardware devices
 - d. An interface that regulates that regulates hardware and software programs
2. The portion of the process scheduler in an operating system that dispatches processes is concerned with CO1K2
 - a. assigning ready processes to waiting queue
 - b. assigning running processes to blocked queue
 - c. assigning ready processes to CPU
 - d. assigning ready processes to block
3. When a process is in a "Blocked" state waiting for some I/O service. When the service is completed, it goes to the CO2K2
 - a. Terminated state
 - b. Suspended state
 - c. Running state
 - d. Ready state
4. The segment of code in which the process may change common variables, update tables, write into files is known as CO2K3
 - a. program
 - b. critical section
 - c. non – critical section
 - d. synchronizing
5. Which of the memory unit that processor can access more rapidly CO2K2
 - a. Main memory
 - b. Virtual Memory
 - c. Cache Memory
 - d. Readonly Memory
6. In priority scheduling algorithm CO3K1
 - a. CPU is allocated to the process with highest priority
 - b. CPU is allocated to the process with lowest priority
 - c. Equal priority processes can not be scheduled
 - d. CPU is allocated to the first process

Part-B

3x6=18

Answer ALL Questions

Answer should not exceed 400 words or two pages

7. a. Write about operations on process. CO1K1
(or)
7. b. Discuss about process control block. CO1K1
8. a. Write notes on critical section. CO2K2
(or)
8. b. Explain storage hierarchy with a suitable diagram. CO2K1
9. a. Discuss about storage protection in single and multiuser environment. CO3K2
(or)
9. b. Write notes on Deadline and FIFO scheduling algorithms. CO3K1

Part-C

3x12=36

Answer ALL Questions

Answer should not exceed 800 words or four pages

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| 10. a. Explain process state transition with suitable diagram.
(or) | CO1K1 |
| 10. b. Demonstrate parallel processing with an example. | CO1K2 |
| 11. a. Write notes on semaphores and its types.
(or) | CO2K3 |
| 11. b. Discuss about storage Management strategies. | CO2K2 |
| 12. a. Explain paging with suitable diagram.
(or) | CO3K2 |
| 12. b. Discuss about direct mapping and associative mapping in segmentation. | CO3K3 |

Staff in-charge: S.Anitha

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