



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 2025
I SEMESTER

Class : I UG
Major: B.Voc (AI & ML)

Time: 2 hours
Maximum Marks: 60

23VAIC04 Operating System

Course Outcomes:

1. Discuss the evaluation of operating systems.
2. Explain different resource managements performed by operating system.
3. Describe the architecture in terms of functions performed by different types of operating systems.
4. Analyze the performance of different algorithms used in design of operating system components.
5. Describe the I/O managements and file managements performed by different design of operating systems.

Part-A

6x1=6

Choose the correct answer

1. Which of the following best describes an Operating System?
a. Hardware b. Compiler c. Interface d. Browser CO1K2
2. Which strategy is used by the OS to manage multiple processes effectively?
a. Scheduling b. Designing c. Debugging d. Printing CO1K1
3. Which of the following is a peripheral device?
a. CPU b. Monitor c. ALU d. Cache CO2K1
4. Which of the following is permanently stored software in a hardware device?
a. Software b. Firmware c. Hardware d. Malware CO2K2
5. Which term best defines a program in execution?
a. Thread b. Process c. File d. Code CO3K2
6. Which of the following is NOT a process state?
a. New b. Ready c. Pause d. Terminated CO3K1

Part- B

3x6=18

Answer ALL Questions

Each answer should not exceed 400 words or two pages

- 7.a. Describe the history of the operating system. CO1K3
(or)
- 7.b. Explain storage hierarchy in detail. CO1K2
- 8.a. Differentiate firmware and middleware. CO2K2
(or)
- 8.b. Explain the hardware support for operating system. CO2K3
- 9.a. Write a short note on process state transition. CO3K3
(or)
- 9.b. Explain about interprocess communication. CO3K2

Part-C

3x12=36

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 10.a. Explain about storage management strategies in detail. CO1K
(or)
- 10.b. Define operating system and describe about operating system architectures. CO1K3
- 11.a. Explain compiling, linking and loading. CO2K1
(or)
- 11.b. Explain the evolution of hardware devices. CO2K3
- 12.a. Define process and describe process operations. CO3K4
(or)
- 12.b. Define Interrupts and briefly explain about interrupt processing. CO3K3

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