

Mid-West University
Examinations Management Office
Final Examinations -2081

Level: Bachelor /B.Sc. CSIT/ Semester: IV

F.M: 60

Time: 3hrs.

P.M: 30

Subject: Operating System (COM441)

Candidates are required to give their answers in their own words as far as practicable. The figure in the margin indicates full marks.

GROUP "A"

Very short answer questions (Attempt ALL) [8 x 2 = 16]

1. What are the main two goals of OS in computer system?
2. What is the major difference between multitasking and multiprocessing?
3. What do you mean by Thrashing?
4. When does page replacement is necessity?
5. What is the main function of threads?
6. Why deadlock is problem in operating system?
7. What is the function of shrink operation in disk management?
8. What is backup?

GROUP "B"

Short answer questions (Attempt ANY FIVE) [5 x 4 = 20]

9. Explain different states of process with appropriate diagram.
10. Explain key characteristics of monolithic operating system with its advantages.

11. Why operating system is called bridge between hardware and user? Justify with example.
12. Explain how thread works in a server for a website.
13. What do you mean by virtual memory? Explain swapping with appropriate diagram.
14. Write short note on:
 - a. System Calls
 - b. SCAN Algorithm

GROUP "C"

Long answer questions (Attempt ANY THREE) [3 x 8 = 24]

15. What are semaphores? Explain various batch type scheduling algorithm with appropriate example.
16. Write short note on following:
 - a. Round-Robin Scheduling
 - b. Memory Hierarchy
 - c. Virtual Memory
17. What is segmentation? Differentiate between FIFO and LRU page replacement with appropriate example.
18. What do you mean by stable storage management? Explain need for stable storage management with recovery mechanism.

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