

Operating Systems MidTerm Exam

Student Name	
Duration	1h20

Instructions

Fill all questions from 1 to 20 (Generic Section)

Fill all questions from 21 to 30 (Linux Section)

Fill all questions from 31 to 40 (MacOS Section) **OR** from 41 to 50 (Windows Section)



1 - What is the relationship between threads and processes?		
A processes is a container for threads	○ Threads is a container for processes	
○ Threads and processes are not related	○ None of the above	
2 - Threads are cheaper to context switch than processes		
○ True	○ False	
3 - Main memory is also known as		
○ Single-user memory	○ Finite memory	
Random access memory	○ Virtual memory	
4 - In demand paging, when an excessive number of pages are moved back and forth between main memory and secondary storage, it is called		
○ Paging	○ Faulting	
○ Trashing	Swapping	



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5 - The efficiency of a batch system is measured in, which is the number of jobs completed in a given amount of time.		
○ Processes	○ Throughput	
○ Threads	○ Turnaround time	
6 - Threads are cheaper to create than processes		
○ True	○ False	
7 - The Process Scheduler assigns the CPU to execute the processes for those jobs placed on the queue by the Job Scheduler.		
○ WAITING	○ PROCESS	
○ NEXT	○ READY	
8 - A(n) is created by a process, and it can be scheduled and executed independently of its parent process.		
○ Thread	○ Instruction Set	
○ Program	○ Mini-Process	



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9 are special files with listings of filenames and their attributes.		
○ Database	○ Programs	
○ Directories	○ Data Files	
10 - Cooperating processes need Inter-Process communication (IPC)		
◯ True	○ False	
11 of memory is performed by the operating system to reclaim fragmented		
sections of the memory space.		
○ Deallocation	○ Compaction	
○ Redirection	○ Reallocation	
12 – Inter-Process Communication (IPC) Mechanisms/techniques are:		
○ Signal, Pipes and Threads	O Pipes, signals and message passing	
Message Passing, Signals and Threads	○ Threads, pipes and message passing	



13 - The major objective of process cooperation include:		
○ Information Sharing	○ Computation Speedup	
○ Modularity	○ All of the above	
14 - Signals are used in UNIX systems to notify a process that a particular event has occurred.		
○ True	○ False	
15 - Type of Multi-Threading Levels:		
○ User-Level Threads (ULT)	○ Hybrid ULT/KLT Approach	
○ Kernel-Level Threads (KLT)	○ All of the above	
16 – What is A Three-state Process Model ?		
O Running-Blocked-Waiting	○ Ready-Running-Terminated	
○ Ready-Running-Waiting	○ None of the above	



17 - Example of Threads Implementation:		
○ Windows Threads	O POSIX Threads	
◯ Java Threads	○ All of the above	
18 - PTE means Page Thread Entry?		
○ True	○ False	
19 - What does it mean MMU?		
Memory Management Usage	Memory Management Unit	
Memory Management User	○ None of the above	
20 – Which types of semaphores ?		
○ Full	○ Empty	
○ Mutex	○ All of the above	



L I N U X

21 - Command to list files:		
○Is	○ grep	
○ list	∫ find	
22 - The command to help in Linux is "mann":		
◯ True	○ False	
23 - How can you view what file systems are mounted in Linux ?		
□ df -h	□ Is	
□ tar	□ mount	
24 - How can you archive in Linux ?		
gzip	○ zip	
○ compress	◯ tar	



L I N U X

25 - How can you compress in Linux ?		
○ zip	○ compress	
gzip	○ All of the above	
26 - Which command could you use to show the list of files in Tree format?		
□ ps -e f	□ pstree	
□ ps -ef	□ ps aux	
27 - Which command could you use to delete a directory?		
□ rmdir	□ rm	
□ del	□ rm -rf	



L I N U X

28 - What does it mean the next file permission "644" ?		
rwxrwx	○_x_x_x	
Orw_rr	Orw_rw_	
29 - Which command must you use to search file in your drive?		
○ls	∫ find	
○ help	○ search	
30 - Which command must you use to see the information by page?		
○ cat	○ page	
○ more	◯ head	



A C O

31 - Command to list files:		
○ls	○ grep	
○ list	∫ find	
32 - The next command "ps –e f" is working on MacOS:		
○ True	○ False	
33 - Which command must you use to check CPU Info?		
□ mount	□ Is	
□ tar	□ sysctl	
34 - Which tool or command could you use to edit a file?		
○ vi	○ notes	
○ textedit	○ All of the above	



M A C O S

35 - How can you compress in MacOS?		
○ zip	○ compress	
gzip	○ All of the above	
36 - Which tool or command could you use to show process?		
□ top	☐ activity monitor	
□ resmon	□ monitor	
37 - Which command could you use to show the list of files in Tree format?		
□ ps	□ pstree	
□ ps -ef	□ ps aux	



A C O

38 - Which command could you use to delete a file?		
○ rmdir	○ rm	
○ del	○ delete	
39 - Which command must you use to search file in your drive?		
○Is	∫ find	
help	○ search	
40 - Which command must you use to check the directory where you are in the terminal screen?		
○ cat	○ pwd	
○ more	○ls	



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41 - Command to list files:				
○Is	○ dir			
○ list	◯ find			
42 - The next command "mountvol" is working in Windows:				
○ True	○ False			
43 - Which tool or command could you use to show process?				
□ top	□ task manager			
□ resmon	☐ monitor			
44 - How can you archive in Linux ?				
gzip	○ zip			
○ 7-zip	○ All of the above			



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45 - Which command/tool must you use to list process?		
○ ps	○ tasklist	
○ls	○ list	
46 - Which tool could you use to show the processes list?		
☐ Process Monitor	☐ Process Explorer	
☐ Task Manager	☐ Activity Monitor	
47 - Which command could you use to delete a directory?		
□ rmdir	□ rm	
□ del	□ delete	



	48 - The command to co	48 - The command to compare files is "fc"		
SCHOOL OF HUMAN SCIENCES & TECHNOLOGY	○ TRUE		○ FALSE	
W	49 - Which command must you use to search file in your drive?			
I	○ls		∫ find	
N	dir		○ search	
D				
0	50 - To create a new file you can use the command "type"		and "type"	
W	○ TRUE		○ FALSE	
S				