

University of Mumbai

Examination 2020 under cluster 4 (PCE)

Program: TE Electronics and Telecommunication Engineering

Curriculum Scheme: Rev 2012

Examination: Third Year Semester VI

Course Code: ETC605 and Course Name: Operating System

Time: 1 hour

Max. Marks: 50

Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	which of the following is part of OS? 1)kernel service 2) library service 3) Application level service
Option A:	Point 1
Option B:	Point 1,2
Option C:	Point 1,3
Option D:	Point 1,2,3
Q2.	_____refers to the ability of an OS to support multiple threads of execution with a single process
Option A:	Multithreading
Option B:	Bitthreading
Option C:	Multiprocessing
Option D:	Multiexecuting
Q3.	write system call returns -1 when _____
Option A:	if disk fills up while write is in progress
Option B:	when file doesn't exist
Option C:	if the file size exceeds the system's limit
Option D:	if disk fills up while write is in progress and if the file size exceeds
Q4.	Which one of the following error will be handle by the operating system? 1) power failure 2) lack of paper in printer 3) connection failure in the network
Option A:	Point 1
Option B:	Point 2 &3
Option C:	Point 1,2,&3
Option D:	Point 2 only
Q5.	A procedure defined within a _____ can access only those variables declared locally within the _____ and its formal parameters.
Option A:	Process,semaphore
Option B:	Process,monitor
Option C:	Semaphore,semaphore
Option D:	Monitor,monitor
Q6.	A situation where several processes access and manipulate the same data concurrently and the outcome of the execution depends on the particular order in

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	which access takes place is called _____
Option A:	Data consistency
Option B:	Aging
Option C:	Starvation
Option D:	Race condition
Q7.	A deadlock eventually cripples system throughput and will cause the CPU utilization to _____
Option A:	Increase
Option B:	Drop
Option C:	Stay still
Option D:	Remains constant
Q8.	Which of the following does not interrupt a running process?
Option A:	Device
Option B:	Timer
Option C:	Scheduler process
Option D:	Power failure
Q9.	A multilevel page table is preferred in comparison to a single level page table for translating virtual address to physical address because _____
Option A:	it reduces the memory access time to read or write a memory location
Option B:	it is required by the translation lookaside buffer
Option C:	it helps to reduce the size of page table needed to implement the virtual address space of a process
Option D:	it helps to reduce the number of page faults in page replacement algorithms
Q10.	Which type of software can be used to merge data of two files in one file ?
Option A:	Networking software
Option B:	Documenting software
Option C:	System software
Option D:	Utility Software
Q11.	Which RAID type doesn't use parity for data protection?
Option A:	Raid 3
Option B:	Raid 2
Option C:	Raid 4
Option D:	Raid 1
Q12.	Consider a disk queue with requests for I/O to blocks on cylinders 98 183 37 122 14 124 65 67 Considering FCFS (first cum first served) scheduling, the total number of head movements is, if the disk head is initially at 53 is?
Option A:	600
Option B:	640
Option C:	540
Option D:	480
Q13.	Whenever a number of devices interrupt a CPU at a time, and if the processor is

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	able to handle them properly, it is said to have
Option A:	multiple interrupt processing ability
Option B:	Interrupt handling ability
Option C:	Interrupt processing ability
Option D:	Multiple interrupt executing ability
Q14.	In how many categories, commands of UNIX operating system classified?
Option A:	1
Option B:	2
Option C:	Many
Option D:	0
Q15.	Which of the following is not a part of job control facilities?
Option A:	Relate a job to background
Option B:	Bring it back to the foreground
Option C:	Kill a job
Option D:	Create a new job
Q16.	What is the major disadvantage with a linked allocation?
Option A:	internal fragmentation
Option B:	External fragmentation
Option C:	There is no sequential access
Option D:	There is only sequential access
Q17.	Which option is used with ls command to list the directory attributes rather than its contents?
Option A:	-a
Option B:	-b
Option C:	-c
Option D:	-d
Q18.	The root directory is represented by ____
Option A:	\
Option B:	/
Option C:	*
Option D:	\$
Q19.	Which of the following format of partition tables does Linux use?
Option A:	BSD
Option B:	MAC
Option C:	DOS
Option D:	Unixware
Q20.	Which command can force all buffers to disk?
Option A:	Save
Option B:	Edbuff
Option C:	Flush
Option D:	sync

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Q21.	Which command changes a file's group owner
Option A:	Cgrp
Option B:	Chgrp
Option C:	Change
Option D:	group
Q22.	In Linux OS use _____ to show the information about the system your Linux distro is running
Option A:	Name
Option B:	lname
Option C:	uname
Option D:	Sname
Q23.	A process P1 has a period of 50 and a CPU burst of $t_1 = 25$, P2 has a period of 80 and a CPU burst of 35. The total CPU utilization is _____
Option A:	0.9
Option B:	0.74
Option C:	0.94
Option D:	0.8
Q24.	T shares of time are allocated among all processes out of N shares in _____ scheduling algorithm.
Option A:	Rate monotonic
Option B:	Proportional share
Option C:	EDF(earliest Deadline first)
Option D:	Priority algorithm
Q25.	If there are a total of $T = 100$ shares to be divided among three processes, A, B and C. A is assigned 50 shares, B is assigned 15 shares and C is assigned 20 shares. A will have _____ percent of the total processor time.
Option A:	20
Option B:	15
Option C:	50
Option D:	25

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	D
Q2.	A
Q3.	D
Q4	C
Q5	D
Q6	D
Q7	B
Q8.	C
Q9.	C
Q10.	D
Q11.	D
Q12.	B
Q13.	A
Q14.	B
Q15.	D
Q16.	D
Q17.	D
Q18.	B
Q19.	C
Q20.	D
Q21.	B
Q22.	C
Q23.	C
Q24.	B
Q25.	C