Online Examinations (Even Sem/Part-I/Part-II Examinations 2020 - 2021

Course Name - –Advanced Operating System
Course Code - PCC-MCS203

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Answer all the questions. Each question carry one mark.

9. 1.By operating system, the resource management can be done via _____

Mark only one oval.

- time division multiplexing
- space division multiplexing
- time and space division multiplexing
- none of the mentioned

10. 2.Which facility dynamically adds probes to a running system, both in user processes and in the kernel?

Mark only one oval.

- DTrace
- DLocate
- DMap
- DAdd

11. 3.The Operating System is _____

Mark only one oval.

- Application Software
- System Software
- both a and b
- None of this

12. 4.Which one is the innermost component of Operating System?

Mark only one oval.

- Kernel
- Shell
- both a and b
- None of this

13. 5.What is the function of Kernel?

Mark only one oval.

- Makes Communication between Hardware and Software
- Makes Communication between Application and Software Software.
- Makes interface for Users
- None of this

14. 6.What is the function of FORK() in Kernel

Mark only one oval.

- To create child process
- To create processor
- to create deadlock
- to create TLB

15. 7.Multiprocessing system gives a

Mark only one oval.

- Small system
- ightly coupled system
- loosely coupled system
- Macro system

16. 8.Who was the inventor of Android Operating System?

Mark only one oval.

- Steve Jobs
- Bill Gates
- Andy Rich Nick
- Kernel Torvalds

17. 9.System structure of Linux is

Mark only one oval.

- Microsoft Windows
- UNIX
- Window Vista
- Monolithic Kernel

18. 10.Program execution services are used to

Mark only one oval.

- Control Program
- Delete Program
- Execute Program
- Update Programs

19. 11.Third Generation of OS in_____

Mark only one oval.

- 945-1965
- 965-1980
- 1980-1995
- 1995-Now

20. 12.The systems which allow only one process execution at a time, are called _____

Mark only one oval.

- uni programming systems
- uni processing systems
- uni tasking systems
- none of the mentioned

21. 13.Process control by_____

Mark only one oval.

- OS Kernel
- Shell
- Both and b
- none of the mentioned

22. 14.In Unix, Which system call creates the new process?

Mark only one oval.

- fork
- create
- new
- none of the mentioned

23. 15.Program is_____

Mark only one oval.

- Dynamic Concept
- istributed Concept
- Real Time Concept
- Static Concept

24. 16.A process stack does not contain _____

Mark only one oval.

- Function parameters
- Local variables
- Return addresses
- PID of child process

25. 17.Which system call returns the process identifier of a terminated child?

Mark only one oval.

- wait
- exit
- fork
- get

26. 18.Which of the following does not interrupt a running process?

Mark only one oval.

- A device
- Timer
- Scheduler process
- Power failure

27. 19.The context of a process in the PCB of a process does not contain _____

Mark only one oval.

- the value of the CPU registers
- the process state
- memory-management information
- context switch time

28. 20.What is a medium-term scheduler?

Mark only one oval.

- It selects which process has to be brought into the ready queue
- It selects which process has to be executed next and allocates CPU
- It selects which process to remove from memory by swapping
- None of the mentioned

29. 21.What is a short-term scheduler?

Mark only one oval.

- It selects which process has to be brought into the ready queue
- It selects which process has to be executed next and allocates CPU
- It selects which process to remove from memory by swapping
- None of the mentioned

30. 22.Which scheduling algorithm allocates the CPU first to the process that requests the CPU first?

Mark only one oval.

- first-come, first-served scheduling
- shortest job scheduling
- priority scheduling
- none of the mentioned

31. 23.Process are classified into different groups in _____

Mark only one oval.

- shortest job scheduling algorithm
- round robin scheduling algorithm
- priority scheduling algorithm
- multilevel queue scheduling algorithm

32. 24.Preemptive Shortest Job First scheduling is sometimes called _____

Mark only one oval.

- Fast SJF scheduling
- EDF scheduling "Earliest Deadline First"
- HRRN scheduling "Highest Response Ratio Next"
- SRTN scheduling "Shortest Remaining Time Next"

33. 25.An SJF algorithm is simply a priority algorithm where the priority is _____

Mark only one oval.

- the predicted next CPU burst
- the inverse of the predicted next CPU burst
- the current CPU burst
- anything the user wants

34. 26.A solution to the problem of indefinite blockage of low â€“ priority processes is _____

Mark only one oval.

- Starvation
- Wait queue
- Ready queue
- Aging

35. 27.A process is selected from the _____ queue by the _____ scheduler, to be executed.

Mark only one oval.

- blocked, short term
- wait, long term
- ready, short term
- ready, long term

36. 28.Mutual exclusion can be provided by the _____

Mark only one oval.

- mutex locks
- binary semaphores
- both mutex locks and binary semaphores
- none of the mentioned

37. 29.Process synchronization can be done on _____

Mark only one oval.

- hardware level
- software level
- both hardware and software level
- none of the mentioned

38. 30.What are the two atomic operations permissible on semaphores?

Mark only one oval.

- wait
- stop
- hold
- none of the mentioned

39. 31.The wait operation of the semaphore basically works on the basic _____ system call.

Mark only one oval.

- stop()
- block()
- hold()
- wait()

40. 32.The code that changes the value of the semaphore is _____

Mark only one oval.

- remainder section code
- non-critical section code
- critical section code
- none of the mentioned

41. 33.Each process Pi, i = 0,1,2,3,9 is coded as follows. repeat P(mutex) {Critical Section} V(mutex) Forever The code for P10 is identical except that it uses V(mutex) instead of P(mutex). What is the largest number of processes that can be inside the critical section at any moment (the mutex being initialized to 1)?

Mark only one oval.

- 1
- 2
- 3
- None of the mentioned

42. 34.What is a semaphore?

Mark only one oval.

- is a binary mutex
- must be accessed from only one process
- can be accessed from multiple processes
- none of the mentioned

43. 35.What is a mutex?

Mark only one oval.

- is a binary mutex
- must be accessed from only one process
- can be accessed from multiple processes
- none of the mentioned

44. 36.A binary semaphore is a semaphore with integer values _____

Mark only one oval.

- 1
- -1
- 0.8
- 0.5

45. 37.Semaphores are mostly used to implement _____

Mark only one oval.

- System calls
- IPC mechanisms
- System protection
- None of the mentioned

46. 38.Spinlocks are intended to provide _____ only.

Mark only one oval.

- Mutual Exclusion
- Bounded Waiting
- Aging
- Progress

47. 39.Swap space exists in _____

Mark only one oval.

- primary memory
- secondary memory
- Central Processing Unit
- none of the mentioned

48. 40.When a program tries to access a page that is mapped in address space but not loaded in physical memory, then _____

Mark only one oval.

- segmentation fault occurs
- fatal error occurs
- page fault occurs
- no error occurs

49. 41.In FIFO page replacement algorithm, when a page must be replaced _____

Mark only one oval.

- oldest page is chosen
- newest page is chosen
- random page is chosen
- none of the mentioned

50. 42.Which of the following page replacement algorithms suffers from Belady's Anomaly?

Mark only one oval.

- Optimal replacement
- LRU
- FIFO
- Both optimal replacement and FIFO

51. 43.If no frames are free, _____ page transfer(s) is/are required.

Mark only one oval.

- one
- two
- three
- four

52. 44.A FIFO replacement algorithm associates with each page the _____

Mark only one oval.

- time it was brought into memory
- size of the page in memory
- page after and before it
- all of the mentioned

53. 45.What is the Optimal page " replacement algorithm"?

Mark only one oval.

- Replace the page that has not been used for a long time
- Replace the page that has been used for a long time
- Replace the page that will not be used for a long time
- None of the mentioned

54. 46.Segment replacement algorithms are more complex than page replacement algorithms because _____

Mark only one oval.

- Segments are better than pages
- Pages are better than segments
- Segments have variable sizes
- Segments have fixed sizes

55. 47.What are the two methods of the LRU page replacement policy that can be implemented in hardware?

Mark only one oval.

- Counters
- RAM & Registers
- Stack & Counters
- Registers

56. 48.LRU page replacement algorithm associates with each page the _____

Mark only one oval.

- time it was brought into memory
- the time of that page's last use
- page after and before it
- all of the mentioned

57. 49.For 3 page frames, the following is the reference string: 7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1 How many page faults does the LRU page replacement algorithm produce?

Mark only one oval.

- 10
- 15
- 11
- 12

58. 50.Using a pager _____

Mark only one oval.

- ◯ increases the swap time
- ◯ decreases the swap time
- ◯ decreases the swap time & amount of physical memory needed
- ◯ increases the amount of physical memory needed

59. 51.A page fault occurs when?

Mark only one oval.

- ◯ a page gives inconsistent data
- ◯ a page cannot be accessed due to its absence from memory
- ◯ a page is invisible
- ◯ all of the mentioned

60. 52.When the page fault rate is low _____

Mark only one oval.

- ◯ the turnaround time increases
- ◯ the effective access time increases
- ◯ the effective access time decreases
- ◯ turnaround time & effective access time increases

61. 53.Physical memory is broken into fixed-sized blocks called _____

Mark only one oval.

- frames
- pages
- backing store
- none of the mentioned

62. 54.The _____ is used as an index into the page table.

Mark only one oval.

- frame bit
- page number
- page offset
- frame offset

63. 55.With paging there is no _____ fragmentation.

Mark only one oval.

- internal
- external
- either type of
- none of the mentioned

64. 56.The operating system maintains a _____ table that keeps track of how many frames have been allocated, how many are there, and how many are available.

Mark only one oval.

- page
- mapping
- frame
- memory

65. 57.Paging increases the _____ time.

Mark only one oval.

- waiting
- execution
- context switch
- all of the mentioned

66. 58.The page table registers should be built with _____

Mark only one oval.

- very low speed logic
- very high speed logic
- a large memory space
- none of the mentioned

67. 59.For every process there is a _____

Mark only one oval.

- page table
- copy of page table
- pointer to page table
- all of the mentioned

68. 60.The heads of the magnetic disk are attached to a _____ that moves all the heads as a unit.

Mark only one oval.

- spindle
- disk arm
- track
- none of the mentioned