A#Q1. Which of the following is true for an Operating System?

A. It is system software that is used as an intermediate code:

B. It is system software that is used as an interface between end-user and system

and also an interface between applications and system.

C. It is system software used to convert application code to assembly code

D. It is system software used to generate offset addresses in assembly code

A#Q1ANS=B

A#Q2. The Program-Counter (PC) register used in the CPU holds which of the following?

A. instruction mnemonic B. address of the next instruction

C. operands used by the instruction D. address of the operands used by instruction

A#Q2ANS= B

A#Q3. Which of the following mechanism is used to indicate the completion of IO?

A. Kernel continuously polls the IO device B. IO device generates an interrupt

C. Both A and B D. None of the above

A#Q3ANS=B

A#Q4. Which of the following is essential in order to execute any application?

A. It must be loaded in the RAM B. It must have high priority

C. It must have system calls D. All the above

A#Q4ANS=A

A#Q5 Which of the following can define a process in Operating System?

A. Process is a program in execution B. Process is a path of execution

C. Process is the compiled code D. Process is a list of activity to solve a problem.

A#Q5ANS=A

A#Q6 Which of the following bash command is used to copy a non-empty directory “source” to another directory “destination”? Assume that source and destination are in current pwd.

A. cp source destination B. cp –dir source destination

C. cp –r source destination D. cp destination source

A#Q6ANS=C

A#Q7. Which of the following is true with respect to process life cycle?

A. A process in running state encounters IO instruction, the process state changes to “Ready”.

B. A process completes its sleep and the process state changes to “Running”.

C. A running process gets a timer interrupt, the process state changes to “Ready”

D. All the above

A#Q7ANS=C

A#Q8. Which system call can be used to abruptly terminate a process?

A. term B. kill

C. destroy D. close

A#Q8ANS=B

A#Q9. Which of the following is true for a “SHELL” in linux?

A. Shell is a program that acts like a command line interface

B. Different shells are available, but the default shell is bash

C. Every command in the command-set of a shell runs as a process

D. All the above

A#Q9ANS=D

A#Q10. Which of the following can be used to view the value of environment variable “SHELL”.? Assume “bash”.

A. echo “$SHELL” B. echo SHELL

C. value “Shell” D. None

A#Q10ANS=A

A#Q11. Which of the following is used to uniquely identify a process in a system?

A. process id B. process name C. both A and B D. none

A#Q11ANS=A

A#Q.12 Which of the following is the aim of a good process scheduling algorithm?

A. Reduce average turnaround time B. Increase average turnaround time

C. Increase response time D. None of the above

A#Q12ANS=A

A#Q13. Which of the following scheduling algorithm will not lead to starvation?

A. FCFS B. SJF C. Priority D. All the above

A#Q13ANS=A

A#Q14. Which of the following is a disadvantage of Preemptive Priority scheduling algorithm?

A. Starvation B. Higher turn-around time of processes

C. Multitasking-effect D. Lower turn-around time of processes

A#Q14ANS=A

A#Q15. Which of the following is a preferred scheduling algorithm for RTOS?

A. Fair-Share B. Round Robin C. EDF D. All the above

A#Q15ANS=C

A#Q16. Which of the following is true for a Semaphore?

A. Semaphore is an integer B. It can be binary or counting in nature

C. It can be operated upon by two atomic functions only D. All the above

A#Q16ANS=D

A#Q17. The problem of race condition can be solved by which of the following techniques?

A. Mutual Exclusion B. Critical Section

C. Process scheduling D. Deadlock

A#Q17ANS=A

A#Q18. Which of the following is the disadvantage of Shared Memory IPC technique?

A. Race Condition B. Out of memory

C. both A and B D. None

A#Q18ANS=A

A#Q19. Which of the following IPC technique can share only integer data between processes?

A. Pipes B. Shared Memory

C. Semaphore D. Message Queue

A#Q19ANS=C

A#Q20. Which of the following is the disadvantage of paging?

A. External Fragmentation is removed totally B. Page table size is very large

C. Internal Fragmentation is removed totally D. All the above

A#Q20ANS=B

A#Q21. Which of the following is the advantage of segmentation?

A. Segment table size is small B. Internal Fragmentation is removed

C. External fragmentation is partially removed D. All the above

A#Q21ANS=D

A#Q22. Which of the following is the cause of Thrashing?

A. Global page replacement policy B. Local page replacement policy

C. both A and B D. None of the above

A#Q22ANS=A

A#Q23. In demand paging technique, partial process is loaded in RAM. Where is the remaining part of the process placed?

A. Swap space on hard disk B. Swap space on RAM

C. A special type of RAM called as Virtual Memory D. None of the above

A#Q23ANS=A

A#Q24. Which one of the following is not an advantage of demand paging?

A. External fragmentation is removed B. Degree of Multiprogramming increases

C. A very huge process that does not fit into the RAM entirely, can also be executed

D. None of the above

A#Q24ANS=D

A#Q25. Which of the following is the solution to internal fragmentation?

A. Paging B. Paged-Segmentation

C. Compaction D. None

A#Q25ANS=D

A#Q26. Which of the following is the disadvantage of Linked Block Allocation Technique?

A. It is easy to allocate blocks for a growing file B. Random access is not possible

C. External fragmentation is avoided D. Both A and C

A#Q26ANS=B

A#Q27. Which of the following happens when we delete a file?

A. The blocks allocated to the file are moved to free list from allocated list

B. The contents of the file blocks are erased

C. The blocks allocated to the file are overwritten with null value

D. All the above

A#Q27ANS=A

A#Q28. Which disk scheduling algorithm is prone to starvation?

A. FCFS B. SCAN C. SSTF D. C-SCAN

A#Q28ANS=C

A#Q29. The disk scheduling algorithms attempts to reduce which of the following

A. Average Seek Time B. Average Rotational Latency Time

C. Both A and B D. None of the above

A#Q29ANS=A

A#Q30. Given a page reference string - 2,1,3,1,4,2,5

Assume that 3 frames are used. What will be the number of page-replacements if LRU algorithm is used?

A. 1 B. 2 C. 3 D. 4

A#Q30ANS=C

A#Q31. Which of the following is true for Linux file system?

A. There are multiple drives like C. D. E: etc B. There is a single root denoted by root

C. There is a unique root denoted by / and all file systems are mounted under its sub directories.

D. Sometimes there is a unique root sometimes there are multiple drives, this depends on flavors of Linux

A#Q31ANS=C

A#Q32. What command is used to list the files chap0l, chap02 and chap04 in the current directory?

A. ls chap\* B. ls chap[124] C. ls - x chap0[124] D. ls chap0[124]

A#Q32ANS=D

A#Q33. Which of the following commands is used to search files with specific strings?

A. grep B. search C. get D. none

A#Q33ANS=A

A#Q34. What is the purpose of the pipe system call?

A. A file is opened for reading as well as writing and the respective file descriptors are opened.

B. Multiple processes can share the file descriptors and share the data

C. both A and B D. none of the above

A#Q34ANS=C

A#Q35. Which of the following value is returned by fork system call to the newly created child process?

A. parent process id B. child process id C. 0 D. none

A#Q35ANS=C

A#Q36. Which of the following bash command is used to compress a file?

A. tar B. gzip C. both A and B D. none

A#Q36ANS=B

A#Q37. Which of the following is used to run a process “proc1” in background?

A. **./proc1 &** B. **./proc1** C. both A and B D. none

A#Q37ANS=A

A#Q38. Which of the following is the default shell in linux based OS?

A. bash B. C shell C. korn shell D. none

A#Q38ANS=A

A#Q39. Which of the following is used provide uniform access to different file systems?

A. VFS B. WinFS C. NTFS D. Both A and C

A#Q39ANS=A

A#Q40 Which type of OS requires a consideration of Deadlines for process scheduling?

A. RTOS B. Embedded OS

C. MultiUser OS D.none

A#Q40ANS=A