National Testing Agency

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Operating Systems

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Question Number : 1 Question Id : 89951411850 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which one of the following is the operating system not used for real time applications?
1. VxWorks
2. Windows CE
3. RTLinux
4. Palm OS

Options :

89951446283. 1

89951446284. 2

89951446285. 3

89951446286. 4

Question Number : 2 Question Id : 89951411851 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A thread is usually defined as a 'light weight process' because an operating system (OS) maintains smaller data structures for a thread than for a process. In relation to this, which of the followings is TRUE?
1. On per-thread basis, the OS maintains only CPU register state
2. The OS does not maintain a separate stack for each thread
3. On per-thread basis, the OS does not maintain virtual memory state
4. On per thread basis, the OS maintains only scheduling and accounting information.

Options :

89951446287. 1

89951446288. 2

89951446289. 3

89951446290. 4

Question Number : 3 Question Id : 89951411852 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Let the page fault service time be 10ms in a computer with average memory access time being 20ns. If one-page fault is generated for every 10^6 memory accesses, what is the effective access time for the memory?
1. 21ns
2. 30ns
3. 23ns
4. 35ns

Options :

89951446291. 1

89951446292. 2

89951446293. 3

89951446294. 4

Question Number : 4 Question Id : 89951411853 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

If a process mix, the ready queue will hold _____ process and the short-term scheduler will have a _____ to do.
1. complete, little
2. complete, lot
3. empty, little
4. empty, lot

Options :

89951446295. 1

89951446296. 2

89951446297. 3

89951446298. 4

Question Number : 5 Question Id : 89951411854 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

To avoid the race condition, the number of processes that may be simultaneously inside their critical section is_____.
1. 8
2. 1
3. 16
4. 0

Options :

89951446299. 1

89951446300. 2

89951446301. 3

89951446302. 4

Question Number : 6 Question Id : 89951411855 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The Memory Buffer Register (MBR)_____.
1. is a hardware memory device which denotes the location of the current instruction being executed.
2. is a group of electrical circuits (hardware), that performs the intent of instructions fetched from memory.
3. contains the address of the memory location that is to be read from or stored into.
4. contains a copy of the designated memory location specified by the MAR after a "read" or the new contents of the memory prior to a "write".

Options :

89951446303. 1

89951446304. 2

89951446305. 3

89951446306. 4

Question Number : 7 Question Id : 89951411856 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Consider three CPU-intensive processes, which require 10, 20- and 30-time units and arrive at times 0, 2 and 6, respectively. How many context switches are needed if the operating system implements a shortest remaining time first scheduling algorithm? Do not count the context switches at time zero and at the end.

1. 1
2. 2
3. 3
4. 4

Options :

89951446307. 1

89951446308. 2

89951446309. 3

89951446310. 4

Question Number : 8 Question Id : 89951411857 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Consider three processes, all arriving at time zero, with total execution time of 10, 20 and 30 units, respectively. Each process spends the first 20% of execution time doing I/O, the next 70% of time doing computation, and the last 10% of time doing I/O again. The operating system uses a shortest remaining compute time first scheduling algorithm and schedules a new process either when the running process gets blocked on I/O or when the running process finishes its compute burst. Assume that all I/O operations can be overlapped as much as possible. For what percentage of time does the CPU remain idle?

1. 0%
2. 10.6%
3. 30.0%
4. 89.4%

Options :

89951446311. 1

89951446312. 2

89951446313. 3

89951446314. 4

Question Number : 9 Question Id : 89951411858 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following instruction steps, would be written within the diamond-shaped box, of a flowchart?
1. S = B – C
2. IS A<10
3. PRINT A
4. DATA X,4Z

Options :

89951446315. 1

89951446316. 2

89951446317. 3

89951446318. 4

Question Number : 10 Question Id : 89951411859 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Assembly code data base is associated with _____.
1. an assembly language version of the program which is created by the code generation phase and is input to the assembly phase.
2. a permanent table of decision rules in the form of patterns for matching with the uniform symbol table to discover syntactic structure.
3. consists of a full or partial list or the token's as they appear in the program. Created by Lexical analysis and used for syntax analysis and interpretation.
4. a permanent table which lists all key words and special symbols of the language in symbolic form.

Options :

89951446319. 1

89951446320. 2

89951446321. 3

89951446322. 4

Question Number : 11 Question Id : 89951411860 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The semaphore that allows only one process with a value_____.
1. 8
2. 1
3. 16
4. 0

Question Number : 12 Question Id : 89951411861 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A file system with 300 Byte uses a file descriptor with 8 direct block address. 1 indirect block address and 1 doubly indirect block address. The size of each disk block is 128 Bytes and the size of each disk block address is 8 Bytes. The maximum possible file size in this file system is_____

1. 3 Kbytes
2. 35 Kbytes
3. 280 Bytes
4. Dependent on the size of the disk

Options :

89951446327. 1

89951446328. 2

89951446329. 3

89951446330. 4

Question Number : 13 Question Id : 89951411862 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If the number of bits in a virtual address of a program is 16 and the page size is 0.5 K bytes, the number of pages in the virtual addresses space is_____.

1. 16
2. 32
3. 64
4. 128

Options :

89951446331. 1

89951446332. 2

89951446333. 3

89951446334. 4

Question Number : 14 Question Id : 89951411863 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

In the following process state transition diagram for a uniprocessor system, assume that there are always
some processes in the ready state: Now consider the following statements:
I. If a process makes a transition D, it would result in another process making transition A immediately.
II. A process P2 in blocked state can make transition E while another process P1 is in running state.
III. The OS uses preemptive scheduling.
IV. The OS uses non-preemptive scheduling.
Which of the above statements are TRUE?
1. I and II
2. I and III
3. II and III
4. II and IV

Options :

89951446335. 1

89951446336. 2

89951446337. 3

89951446338. 4

Question Number : 15 Question Id : 89951411864 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Consider three processes (process id 0, 1, 2 respectively) with compute time bursts 2, 4 and 8 time units.
All processes arrive at time zero. Consider the longest remaining time first (LRTF) scheduling algorithm.
In LRTF ties are broken by giving priority to the process with the lowest process id. The average
turnaround time is_____.
1. 13 units
2. 14 units
3. 15 units
4. 16 units

Options :

89951446339. 1

89951446340. 2

89951446341. 3

89951446342. 4

Question Number : 16 Question Id : 89951411865 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

In a system with 32-bit virtual addresses and 1 KB page size, use of one-level page tables for virtual to
physical address translation is not practical because of _____.
1. the large amount of internal fragmentation
2. the large amount of external fragmentation
3. the large memory overhead in maintaining page tables
4. the large computation overhead in the translation process

Options :

89951446343. 1

89951446344. 2

89951446345. 3

89951446346. 4

Question Number : 17 Question Id : 89951411866 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consider the methods used by processes P1 and P2 for accessing their critical sections whenever needed,
as given below. The initial values of shared Boolean variables S1 and S2 are randomly assigned.
Method Used by P1
while (S1 == S2) ;
Critical Section
S1 = S2;
Method Used by P2
while (S1 != S2) ;
Critical Section
S2 = not (S1);
Which one of the following statements describes the properties achieved?
1. Mutual exclusion but not progress
2. Progress but not mutual exclusion
3. Neither mutual exclusion nor progress
4. Both mutual exclusion and progress

Options :

89951446347. 1

89951446348. 2

89951446349. 3

89951446350. 4

Question Number : 18 Question Id : 89951411867 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Consider a disk system with 100 cylinders. The requests to access the cylinders occur in following
sequence:
4, 34, 10, 7, 19, 73, 2, 15, 6, 20
Assuming that the head is currently at cylinder 50, what is the time taken to satisfy all requests if it takes
1ms to move from one cylinder to adjacent one and shortest seek time first policy is used?
1. 95ms
2. 119ms
3. 233ms
4. 276ms

Options :

89951446351. 1

89951446352. 2

89951446353. 3

89951446354. 4

Question Number : 19 Question Id : 89951411868 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

What is the name given to the software which can be legally compiled and often used for free?
1. Shareware program
2. Public domain program
3. Firmware program
4. Mindware

Options :

89951446355. 1

89951446356. 2

89951446357. 3

89951446358. 4

Question Number : 20 Question Id : 89951411869 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The capacity of a memory unit = (the number of words) * (the number of bits / words). What will be the number of separate address and data lines needed for a memory of 4k * 16?
1. 12 address and 16 data lines
2. 12 address and 12 data lines
3. 11 address and 6 data lines
4. 12 address and 8 data lines

Options :

89951446359. 1

89951446360. 2

89951446361. 3

89951446362. 4

Question Number : 21 Question Id : 89951411870 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For how many processes which are sharing common data, the Dekker's algorithm implements mutual exclusion?
1. 1
2. 2
3. 3
4. 4

Options :

89951446363. 1

89951446364. 2

89951446365. 3

89951446366. 4

Question Number : 22 Question Id : 89951411871 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A machine has a physical memory of 64 Mbyte and a virtual address space of 32 - bit. The page size is 4kbyte, what is the approximate size of the page table?
1. 24 Mbyte
2. 16 Mbyte
3. 2 Mbyte
4. 8 Mbyte

Question Number : 23 Question Id : 89951411872 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consider a computer system with 6 tape drives and 'n' processes completing for them. What is the maximum value of 'n' for the system to be deadlock free? (Assuming that each process may need 3 tape drives)

1. 3

2. 2

3. 4

4. 7

Question Number : 24 Question Id : 89951411873 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A program is executing in a pure demand paging system with 100 records per page with 1 free main memory frame. The address sequence that is generated by tracing this program is recorded as follows,
0100, 0200, 0430, 0499, 0510, 0530, 0560, 0120, 0220, 0240, 0260, 0320, 0370

What is the number of page faults?

1. 8

2. 11

3. 7

4. 12

89951446378. 4

Question Number : 25 Question Id : 89951411874 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The average time of service a page fault is 10ms. The time taken to access the memory is 1μs. A 99.99%
hit ratio results in average memory access time _____.
1. 1.9999μs
2. 1.9999ms
3. 1ms
4. 9.99μs

Options :
89951446379. 1
89951446380. 2
89951446381. 3
89951446382. 4

Question Number : 26 Question Id : 89951411875 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

On a single processor four jobs are to be executed. At time t = (0) + (jobs arrive in the order of A, B, C, D).
The burst CPU time requirements are 4, 1, 8, 1-time units respectively. Under Round Robin Scheduling
with the time slice of 1-time unit the completion time of A is _____.
1. 3
2. 5
3. 7
4. 9

Options :
89951446383. 1
89951446384. 2
89951446385. 3
89951446386. 4

Question Number : 27 Question Id : 89951411876 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Consider a uniprocessor computer system that has 2 processes and both of them alternate 10ms CPU bursts with 90ms I / O bursts. Both the processes were created at nearly the same time and can proceed in parallel. What is the scheduling strategy for this system that will result in the least CPU utilization (over a long period of time)?
1. Round Robin scheduling with a time quantum of 5ms
2. First Come First Served scheduling
3. Shortest remaining time first
4. Static priority scheduling with different priorities for the two processes

Options :

89951446387. 1

89951446388. 2

89951446389. 3

89951446390. 4

Question Number : 28 Question Id : 89951411877 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Group 1 contains some CPU scheduling algorithms and Group 2 contains some applications. Match entries in Group 1 to entries in Group 2.

Group I	Group II
(P) Gang Scheduling	(1) Guaranteed Scheduling
(Q) Rate Monotonic Scheduling	(2) Real-time Scheduling
(R) Fair Share Scheduling	(3) Thread Scheduling

1. P – 3 Q – 2 R – 1
2. P – 1 Q – 2 R – 3
3. P – 2 Q – 3 R – 1
4. P – 1 Q – 3 R – 2

Options :

89951446391. 1

89951446392. 2

89951446393. 3

89951446394. 4

Question Number : 29 Question Id : 89951411878 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Let m[0]...m[4] be mutexes (binary semaphores) and P[0] .... P[4] be processes. Suppose each process
P[i] executes the following:
  wait (m[i]); wait(m[(i+1) mode 4]);
  ------
  release (m[i]); release (m[(i+1) mod 4]);
This could cause _____.
1. Thrashing
2. Deadlock
3. Starvation, but not deadlock
4. None of the options

Options :

89951446395. 1

89951446396. 2

89951446397. 3

89951446398. 4

Question Number : 30 Question Id : 89951411879 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

A graphics card has on board memory of 1 MB. Which of the following modes cannot supported by the
card?
1. 1600 x 400 resolution with 256 colours on a 17-inch monitor
2. 1600 x 400 resolution with 16 million colours on a 14-inch monitor
3. 800 x 400 resolution with 16 million colours on a 17-inch monitor
4. 800 x 800 resolution with 256 colours on a 14-inch monitor

Options :

89951446399. 1

89951446400. 2

89951446401. 3

89951446402. 4

Question Number : 31 Question Id : 89951411880 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

What should be the size of ROM if it is used to store the table for multiplication of two 8 bit unsigned integers?
1. 64k x 8
2. 64k x 16
3. 4k x 8
4. 64k x 16

Options :

89951446403. 1

89951446404. 2

89951446405. 3

89951446406. 4

Question Number : 32 Question Id : 89951411881 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A system that uses FIFO page replacement policy has 4-page frames with no pages loaded initially. 100 distinct pages are accessed by the system in some order and then the same 100 pages are accessed in the reverse order. How many page faults will occur?
1. 193
2. 194
3. 195
4. 196

Options :

89951446407. 1

89951446408. 2

89951446409. 3

89951446410. 4

Question Number : 33 Question Id : 89951411882 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Three CPU intensive processes require 10, 20- and 30-time units and arrive at times 0, 2 and 6 respectively. The operating system implements a shortest remaining time first scheduling algorithm. Considering that the context switches at time zero and at the end are not counted the number of context switches are needed is _____.

1. 4
2. 3
3. 2
4. 1

Options :

89951446411. 1

89951446412. 2

89951446413. 3

89951446414. 4

Question Number : 34 Question Id : 89951411883 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

We have a uniprocessor machine where a set of n tasks with known run times r1, r2, r3 ...rn are to be run.
What will be the maximum throughput result of the processor scheduling algorithm?

1. Shortest Job First
2. First Come First Served
3. Round Robin
4. Highest Response Ratio Next

Options :

89951446415. 1

89951446416. 2

89951446417. 3

89951446418. 4

Question Number : 35 Question Id : 89951411884 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

An application loads 100 libraries at startup. Loading each library requires exactly one disk access. The seek time of the disk to a random location is given as 10ms. Rotational speed of disk is 6000rpm. If all 100 libraries are loaded from random locations on the disk, how long does it take to load all libraries? (The time to transfer data from the disk block once the head has been positioned at the start of the block may be neglected)
1. 0.50s
2. 1.50s
3. 1.25s
4. 1.00s

Options :

89951446419. 1

89951446420. 2

89951446421. 3

89951446422. 4

Question Number : 36 Question Id : 89951411885 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Consider a system with 32-bit virtual addresses and 1 kbyte page size. Why is it not possible to use one - level page tables for virtual to physical address translation?
1. The amount of external fragmentation
2. The amount of internal fragmentation
3. The large computation overhead in the translation process
4. The large memory overhead in maintaining page tables

Options :

89951446423. 1

89951446424. 2

89951446425. 3

89951446426. 4

Question Number : 37 Question Id : 89951411886 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

We have an operating system, which is capable of loading and executing a single sequential user process at a time. If the disk head scheduling algorithm which is initially First Come First Served (FCFS) is replaced by Shortest Seek Time First (SSTF) claimed by the vendor to give 50% better benchmark results, then what is the expected improvement in the I / O performance of the user programs?

1. 0%
2. 25%
3. 50%
4. 75%

Options :

89951446427. 1

89951446428. 2

89951446429. 3

89951446430. 4

Question Number : 38 Question Id : 89951411887 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The program given below consists of three concurrent processes P0, P1, P2 and three binary semaphores with the values S0 = 1, S1 = 0, S2 = 0.
How many times the process P0 will print '0'?

Process P0	Process P1	Process P2
wait (s0); Print '0' release (S1); release (S2); }	wait (S1); release (S1);	wait (s2); release (s0);

1. At least thrice
2. Exactly thrice
3. At least twice
4. Exactly twice

Options :

89951446431. 1

89951446432. 2

89951446433. 3

89951446434. 4

Question Number : 39 Question Id : 89951411888 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

An operating system uses Shortest Remaining Time first (SRT) process scheduling algorithm.

Consider the arrival times and execution times for the following processes:

Process Execution time Arrival time

P1	20	0
P2	25	15
P3	10	30
P4	15	45

What is the total waiting time for process P2?

1. 5
2. 15
3. 40
4. 55

Options :

89951446435. 1

89951446436. 2

89951446437. 3

89951446438. 4

Question Number : 40 Question Id : 89951411889 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

An application loads 100 libraries at startup and loading each library exactly one disk access is required. 10ms is the seek time of the disk to a random location and 6000rpm is the rotational speed of the disk. Neglect the time to transfer data from the disk block once the head has been positioned at the start of the block. What will be the time taken by the application to load all the libraries, if all 100 libraries are loaded from random location on the disk?

1. 1.50s
2. 1.00s
3. 1.87s
4. 0.74s

Options :

89951446439. 1

89951446440. 2

89951446441. 3

89951446442. 4

Question Number : 41 Question Id : 89951411890 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Consider a virtual memory system that uses First In First Out (FIFO) page replacement policy and it
allocates a fixed number of frames to a process. Consider the following two statements,
1: Sometimes the page fault rate is increased if the number of page frames allocated is increased.
2: Some programs do not exhibit Locality of reference.
Which of the following is true?
1. 1 is false and 2 is true
2. both 1 and 2 are false
3. both 1 and 2 are true but 2 is not the reason for 1
4. both 1 and 2 are true and 2 is the reason for 1

Options :

89951446443. 1

89951446444. 2

89951446445. 3

89951446446. 4

Question Number : 42 Question Id : 89951411891 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

We have a CPU that generates virtual addresses of 32 bits and the page size is of 4 kbyte. Transition
Lookaside Buffer (TLB) of the processor can hold a total of 128-page table entries and 4 - way set
associative. What is the minimum size of the TLB tag?
1. 16 bit
2. 20 bit
3. 11 bit
4. 15 bit

Options :

89951446447. 1

89951446448. 2

89951446449. 3

89951446450. 4

Question Number : 43 Question Id : 89951411892 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

We have three processes P0, P1 and P2 whose arrival time and burst time are given below. If the preemptive Shortest Job First (SJF) scheduling algorithm is carried out only at arrival or completion of processes then the average waiting time for the three processes is _____.

Process	Arrival time	Burst time
P0	0ms	9ms
P1	1ms	4ms
P2	2ms	9ms

1. 7.33ms
2. 6.33ms
3. 5.0ms
4. 4.33ms

Options :

89951446451. 1

89951446452. 2

89951446453. 3

89951446454. 4

Question Number : 44 Question Id : 89951411893 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

A single processor system has three resource types X, Y and Z, which are shared by three processes. There are 5 units of each resource type. Consider the following scenario, where the column alloc denotes the number of units of each resource type allocated to each process, and the column request denotes the number of units of each resource type requested by a process in order to complete execution. Which of these processes will finish LAST?

	alloc	request
	X Y Z	X Y Z
P0	1 2 1	1 0 3
P1	2 0 1	0 1 2
P2	2 2 1	1 2 0

1. P0
2. P1
3. P2
4. None of the options

Options :

89951446455. 1

89951446456. 2

89951446457. 3

89951446458. 4

Question Number : 45 Question Id : 89951411894 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

A system is having user processes P1,P2,...,PN each requiring QN,QN−1,...,Q1 number of resource instances of resource R. The minimum number of resource instances of R to guarantee that deadlock will not occur _____.
1. NQN−N+1
2. NQ1+N−1
3. (Q1+Q2+...+QN) +N−1
4. (Q1+Q2+...+QN) +1−N

Options :

89951446459. 1

89951446460. 2

89951446461. 3
89951446462. 4

Question Number : 46 Question Id : 89951411895 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

A processor uses 36-bit physical addresses and 32-bit virtual addresses, with a page frame size of 4 Kbytes. Each page table entry is of size 4 bytes. A three-level page table is used for virtual to physical address translation, where the virtual address is used as follows
• Bits 30-31 are used to index into the first level page table
• Bits 21-29 are used to index into the second level page table
• Bits 12-20 are used to index into the third level page table, and
• Bits 0-11 are used as offset within the page

The number of bits required for addressing the next level page table (or page frame) in the page table entry of the first, second and third level page tables are respectively_____.
1. 20, 20 and 20
2. 24, 24 and 24
3. 24, 24 and 20
4. 25, 25 and 24

Options :
89951446463. 1
89951446464. 2
89951446465. 3
89951446466. 4

Question Number : 47 Question Id : 89951411896 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

We have a process that has been allocated 3-page frames and initially none of the pages of the process are available in the memory. The following sequence of page references (reference string) is made by the process:
1, 2, 1, 3, 7, 4, 5, 6, 3, 1
How many page faults will occur for the above reference string with the Least Recently Used (LRU) Page Replacement Policy in comparison to an Optimal Page Replacement policy?
1. 3
2. 2
3. 1
4. 0

Options :

89951446467. 1

89951446468. 2

89951446469. 3

89951446470. 4

Question Number : 48 Question Id : 89951411897 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

We have a process that has been allocated 3-page frames and initially none of the pages of the process are available in the memory. The following sequence of page references (reference string) is made by the process:
1, 2, 1, 3, 7, 4, 5, 6, 3, 1
If Optimal Page Replacement policy is used, _____ page faults will occur for the above reference string.
1. 7
2. 8
3. 9
4. 6

Options :

89951446471. 1

89951446472. 2

89951446473. 3

89951446474. 4

Question Number : 49 Question Id : 89951411898 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Consider a counting semaphore which was initialized to 10 and then 6P (wait) operations and 4v(signal) operations were completed on this semaphore. What is the resulting value of semaphore?

1. 10
2. 9
3. 8
4. 0

Options :

89951446475. 1

89951446476. 2

89951446477. 3

89951446478. 4

Question Number : 50 Question Id : 89951411899 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In the given table it shows P1, P2 and P3 are the three processes. What is the completion order of the 3 processes under the policies First Come First Serve (FCFS)?

Process	Arrival time	Time units required
P1	0	5
P2	1	7
P3	3	4

1. FCFS: P1, P2, P3
2. FCFS: P1, P3, P2
3. FCFS: P1, P3, P2
4. FCFS: P1, P2, P3

Options :

89951446479. 1

89951446480. 2

89951446481. 3

89951446482. 4

Question Number : 51 Question Id : 89951411900 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

A system has 'm' number of resources of same type and 3 processes A, B, C. Share these resources A, B, C which have the peak demand of 3, 4 and 6 respectively. Deadlock will not occur if the value of 'm' is _____.

1. m = 15
2. m = 8
3. m = 13
4. m = 9

Options :

89951446483. 1

89951446484. 2

89951446485. 3

89951446486. 4

Question Number : 52 Question Id : 89951411901 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

OS: If the disk head is located initially at 32, find the number of disk moves required with FCFS if the disk queue of I/O blocks requests are 98, 37, 14, 124, 65, 70.

1. 320
2. 321
3. 324
4. None of the options

Options :

89951446487. 1

89951446488. 2

89951446489. 3

89951446490. 4

Question Number : 53 Question Id : 89951411902 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consider a machine with 64 MB physical memory and a 32-bit virtual address space. If the page size is 4KB, what is the approximate size of the page table?

1. 16 MB
2. 8 MB
3. 2 MB
4. 24 MB

Options :

89951446491. 1

89951446492. 2

89951446493. 3

89951446494. 4

Question Number : 54 Question Id : 89951411903 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Consider Peterson's algorithm for mutual exclusion between two concurrent processes i and j. The program executed by process is shown below.

```
repeat
    flag [i] = true;
    turn = j;
    while (P) do no-op;
    Enter critical section, perform actions, then exit critical
    section
    flag [ i ] = false;
    Perform other non-critical section actions.
  until false;
```

For the program to guarantee mutual exclusion, the predicate P in the while loop should be_____.

1. flag [j] = true and turn = i
2. flag [j] = true and turn = j
3. flag [i] = true and turn = j
4. flag [i] = true and turn = i

Question Number : 55 Question Id : 89951411904 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consider a set of n tasks with known runtimes r1, r2, … rn to be run on a uniprocessor machine. Which of the following processor scheduling algorithms will result in the maximum throughput?
1. Round-Robin
2. Shortest-Job-First
3. Highest-Response-Ratio-Next
4. First-Come-First-Served

Options :

89951446499. 1

89951446500. 2

89951446501. 3

89951446502. 4

Question Number : 56 Question Id : 89951411905 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consider the following snapshot of a system running n processes. Process i is holding X_i instances of a resource R, $1 <= i <= n$. Currently, all instances of R are occupied. Further, for all i, process i has placed a request for an additional Y_i instances while holding the X_i instances it already has. There are exactly two processes p and q such that $Y_p = Y_q = 0$. Which one of the following can serve as a necessary condition to guarantee that the system is not approaching a deadlock?
1. min $(X_p, X_q) <$ max (Y_k) where $k != p$ and $k != q$
2. $X_p + X_q >=$ min (Y_k) where $k != p$ and $k != q$
3. max $(X_p, X_q) > 1$
4. min $(X_p, X_q) > 1$

Options :

89951446503. 1

89951446504. 2

89951446505. 3

89951446506. 4

Question Number : 57 Question Id : 89951411906 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Consider a disk pack with 16 surfaces, 128 tracks per surface and 256 sectors per track. 512 bytes of data
are stored in a bit serial manner in a sector. The capacity of the disk pack and the number of bits required
to specify a particular sector in the disk are respectively:
1. 256 Mbyte, 19 bits
2. 256 Mbyte, 28 bits
3. 512 Mbyte, 20 bits
4. 64 Gbyte, 28 bits

Options :

89951446507. 1

89951446508. 2

89951446509. 3

89951446510. 4

Question Number : 58 Question Id : 89951411907 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

A computer system consists of infinitely large primary memory storage capacity. In other words, the
physical address space exceeds the logical address space significantly in all cases. In such situation which
of the following statements regarding virtual memory is necessarily true?
1. Virtual memory concept can be used to enhance the degree of multiprogramming
2. Virtual memory concept can be used to allow controlled access to program segments
3. Virtual memory concept cannot be used in such situation
4. Virtual memory concept can be used to give multiprogramming capability to system

Options :
89951446511. 1

89951446512. 2

89951446513. 3

89951446514. 4

Question Number : 59 Question Id : 89951411908 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

_____ are often used where very rapid access is required, where fixed length records are used,
and where records are always accessed one at a time.
1. Indexed files
2. Direct files
3. Sequential files
4. Indexed Sequential files

Options :
89951446515. 1
89951446516. 2
89951446517. 3
89951446518. 4

Question Number : 60 Question Id : 89951411909 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The enter_CS() and leave_CS() functions to implement critical section of a process are realized using test-and-set instruction as follows:

```
void enter_CS(X)
{
    while test-and-set(X) ;
}
void leave_CS(X)
{
    X = 0;
}
```

In the above solution, X is a memory location associated with the CS and is initialized to 0. Now consider the following statements:

I. The above solution to CS problem is deadlock-free
II. The solution is starvation free.
III. The processes enter CS in FIFO order.
IV More than one process can enter CS at the same time.

Which of the above statements is TRUE?
1. I only
2. I and II
3. II and III
4. IV only

Options :

89951446519. 1

89951446520. 2

89951446521. 3

89951446522. 4

Question Number : 61 Question Id : 89951411910 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A multilevel page table is preferred in comparison to a single level page table for translating virtual address to physical address because_____.
1. It reduces the memory access time to read or write a memory location.
2. It helps to reduce the size of page table needed to implement the virtual address space of a process.
3. It is required by the translation lookaside buffer.
4. It helps to reduce the number of page faults in page replacement algorithms.
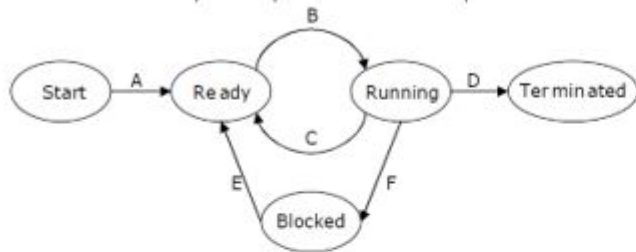
Options :

89951446523. 1

89951446524. 2

89951446525. 3

89951446526. 4

Question Number : 62 Question Id : 89951411911 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

In the following process state transition diagram for a uniprocessor system, assume that there are always some processes in the ready state: Now consider the following statements:

I. If a process makes a transition D, it would result in another process making transition A immediately.
II. A process P2 in blocked state can make transition E while another process P1 is in running state.
III. The OS uses preemptive scheduling.
IV. The OS uses non-preemptive scheduling.

Which of the above statements are TRUE?
1. I and II
2. I and III
3. II and III
4. II and IV

Options :

89951446527. 1
89951446528. 2
89951446529. 3
89951446530. 4

Question Number : 63 Question Id : 89951411912 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

In _____ method on free space management, each block is assigned in a reserved portion
of the disk.
1. Bit tables
2. Chained Free Portions
3. Indexing
4. Free Block List

Options :
89951446531. 1
89951446532. 2
89951446533. 3
89951446534. 4

Question Number : 64 Question Id : 89951411913 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

A_____ free space management has the advantages that it relatively easy to find one or a
contiguous group of free blocks.
1. Bit table
2. Chained Free Portion
3. Indexing
4. Free Block List

Options :
89951446535. 1
89951446536. 2
89951446537. 3
89951446538. 4

Question Number : 65 Question Id : 89951411914 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

In_____method, the file allocation table contains a separate one level index for each file;
the index has one entry for each portion allocated to the file.
1. Chained allocation
2. Indexed allocation
3. Contiguous allocation
4. Variable allocation

Options :

89951446539. 1

89951446540. 2

89951446541. 3

89951446542. 4

Question Number : 66 Question Id : 89951411915 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Directories, pricing tables, schedules and name lists are the examples of _____.
1. Indexed files
2. Direct files
3. Sequential files
4. Indexed Sequential files

Options :

89951446543. 1

89951446544. 2

89951446545. 3

89951446546. 4

Question Number : 67 Question Id : 89951411916 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

An interactive user or a process has associated with pathname is a current directory which is often referred to as the _____.
1. update directory
2. list directory
3. working directory
4. create directory

Options :

89951446547. 1

89951446548. 2

89951446549. 3

89951446550. 4

Question Number : 68 Question Id : 89951411917 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

_____are small fixed portions which provide greater flexibility which may require large tables or complex structures for their allocation.
1. Blocks
2. Columns
3. Segments
4. Partitions

Options :

89951446551. 1

89951446552. 2

89951446553. 3

89951446554. 4

Question Number : 69 Question Id : 89951411918 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is/are the types of operations that may be performed on the directory?
i) Search   ii) Create file   iii) Create directory   iv) List directory
1. i, ii and iii only
2. ii, iii and iv only
3. i, ii and iv only
4. All i, ii, iii and iv

Options :

89951446555. 1

89951446556. 2

89951446557. 3

89951446558. 4

Question Number : 70 Question Id : 89951411919 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Find / -name '*' will_____.
1. List all files and directories recursively starting from /
2. List a file named * in /
3. List all files in / directory

4. List all files and directories in / directory

Options :

89951446559. 1

89951446560. 2

89951446561. 3

89951446562. 4

Question Number : 71 Question Id : 89951411920 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The command "mknod myfifo b 4 16" will _____.
1. create a block device if user is root
2. create a block device for all users
3. create a FIFO if user is not root
4. none of the options

Options :

89951446563. 1

89951446564. 2

89951446565. 3

89951446566. 4

Question Number : 72 Question Id : 89951411921 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Parameters can be passed to a function_____.
1. by using the parameter variables $1, $2, $3.......
2. by using the environment variables
3. by using the parameter & environment variables
4. none of the options

Options :

89951446567. 1

89951446568. 2

89951446569. 3

89951446570. 4

Question Number : 73 Question Id : 89951411922 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Which of the following command provides the list of the functions defined in the login session?
1. declare -f
2. declare -F
3. both declare -f and -F
4. none of the options

Options :

89951446571. 1

89951446572. 2

89951446573. 3

89951446574. 4

Question Number : 74 Question Id : 89951411923 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

What is the output of this program?

```sh
#!/bin/sh
  var="Shell Programming"
  san_function() {
     var="Linux"
     echo $var
  }
  san_function
  exit 0
```

1. Shell Programming
2. Linux
3. Command not found
4. None of the options

Options :

89951446575. 1

89951446576. 2

89951446577. 3

89951446578. 4

Question Number : 75 Question Id : 89951411924 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the output of this program?

```bash
#!/bin/bash
  function san_function1 {
     echo "This is first function"
  }
  san_function2() {
     echo "This is second function"
  }
  san_function1
  san_function2
  exit 0
```

1. This is the first function
2. This is the second function
3. This is the first function
   This is the second function
4. program will generate error because first function definition is not correct

Options :

89951446579. 1

89951446580. 2

89951446581. 3

89951446582. 4

Question Number : 76 Question Id : 89951411925 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

At the start of process execution, STDOUT & STDERR_____.
1. Point to current terminal device
2. Are closed
3. Point to special files on the system
4. None of the options

Options :

89951446583. 1

89951446584. 2

89951446585. 3

89951446586. 4

Question Number : 77 Question Id : 89951411926 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which among the following interacts directly with system hardware?
1. Shell
2. Commands
3. Kernel

4. Applications

Options :

89951446587. 1

89951446588. 2

89951446589. 3

89951446590. 4

Question Number : 78 Question Id : 89951411927 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Applications communicate with kernel by using_____.
1. System Calls
2. C Programs
3. Shell Script
4. Shell

Options :

89951446591. 1

89951446592. 2

89951446593. 3

89951446594. 4

Question Number : 79 Question Id : 89951411928 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

There are two hard links to the "file1" say hl and h2 and a softlink sl. What happens if we deleted the "file1"?
1. We will still be able to access the file with hl and h2 but not with sl
2. We will not be able to access the file with hl and h2 but with sl
3. We will be able to access the file with any of hl, h2 and sl
4. We will not be able to access the file with any of hl, h2 and sl

Options :

89951446595. 1

89951446596. 2

89951446597. 3

89951446598. 4

Question Number : 80 Question Id : 89951411929 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following statement is true?
1. The cp command will preserve the meta data of the file
2. The sort command by default sorts in the numeric order
3. The mv command will preserve the meta data of the file
4. The command ps will display the file system usage

Options :

89951446599. 1

89951446600. 2

89951446601. 3

89951446602. 4

Question Number : 81 Question Id : 89951411930 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which option of make command print the commands that would be executed, but do not execute them?
1. -m
2. -n
3. -o
4. -p

Options :

89951446603. 1
89951446604. 2
89951446605. 3
89951446606. 4

Question Number : 82 Question Id : 89951411931 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The comparison expression "x ~ y" will true if_____.
1. x is not equal to y
2. the string x does not match the regular expression denoted by y
3. the string x matches the regular expression denoted by y
4. none of the options

Options :
89951446607. 1
89951446608. 2
89951446609. 3
89951446610. 4

Question Number : 83 Question Id : 89951411932 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

What is the output of this program?
```
#! /usr/bin/awk -f
  BEGIN {
     print "20"<"9" ? "true":"false"
  }
```

1. true
2. false
3. syntax error
4. none of the options

Options :

89951446611. 1

89951446612. 2

89951446613. 3

89951446614. 4

Question Number : 84 Question Id : 89951411933 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Write the command to display the current date in the form dd/mm/yyyy.
1. date +%d/%m/%Y
2. date +"%d/%m/%Y"
3. date +/%d/%m/20%y
4. date +"/%d/%m/20%y"

Options :

89951446615. 1

89951446616. 2

89951446617. 3

89951446618. 4

Question Number : 85 Question Id : 89951411934 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The command syntax to display the file 'sample.txt' one page at a time is_____.
1. man sample.txt>more
2. cat sample.txt<more
3. cat sample.txt|more
4. none of the options

Options :

89951446619. 1

89951446620. 2

89951446621. 3

89951446622. 4

Question Number : 86 Question Id : 89951411935 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

How do you add (append) a file "file1" to the example.tar file?
1. no you cannot add a file to example.tar
2. tar -cvf example.tar file1
3. tar -rvf file1 example.tar
4. tar -evf file1 example.tar

Options :

89951446623. 1

89951446624. 2

89951446625. 3

89951446626. 4

Question Number : 87 Question Id : 89951411936 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Sed is a command typically used for_____.
1. Perform complex calculations
2. Perform FIFO based non-blocking I/O
3. Modify/print selective contents of a file
4. None of the options

Options :

89951446627. 1

89951446628. 2

89951446629. 3

89951446630. 4

Question Number : 88 Question Id : 89951411937 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the output of this program?
```
#include<stdio.h>
  #include<unistd.h>
  int main()
  {
     pid_t child;
     child = fork();
     printf("%d\n",child);
     return 0;
  }
```

1. it will print "0"
2. it will print the PID of the child process
3. it will print "0" & the PID of the child process
4. none of the options

Options :

89951446631. 1

89951446632. 2

89951446633. 3

89951446634. 4

Question Number : 89 Question Id : 89951411938 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

When you use the ln command, which of the following occurs?
1. a file is created that points to an existing file
2. a file is created that is a copy of an existing file
3. a file is moved from one location to another
4. a file is renamed

Options :
89951446635. 1
89951446636. 2
89951446637. 3
89951446638. 4

Question Number : 90 Question Id : 89951411939 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Binary or executable files are_____.
1. Regular files
2. Device files
3. Special files
4. Directory files

Options :
89951446639. 1
89951446640. 2
89951446641. 3
89951446642. 4

Question Number : 91 Question Id : 89951411940 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Which directory contain device special files?
1. /etc
2. /etc/dev
3./root/bin
4. /dev

Options :

89951446643. 1

89951446644. 2

89951446645. 3

89951446646. 4

Question Number : 92 Question Id : 89951411941 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The files of sysfs contains the information about_____.
1. devices and drivers
2. memory mapping
3. ports
4. none of the options

Options :

89951446647. 1

89951446648. 2

89951446649. 3

89951446650. 4

Question Number : 93 Question Id : 89951411942 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Which of following is not a type of user interface?
1. command line
2. system interface
3. design interface
4. both B and C

Options :

89951446651. 1

89951446652. 2
89951446653. 3
89951446654. 4

Question Number : 94 Question Id : 89951411943 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following operating system does not implement the multitasking truly?
1. Windows 98
2. Windows NT
3. Windows XP
4. MS-DOS

Options :
89951446655. 1
89951446656. 2
89951446657. 3
89951446658. 4

Question Number : 95 Question Id : 89951411944 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

When you start up the computer the boot up storage at which the BIOS versions manufacturer and data are displayed on the monitor is called _____.
1. Bootstrap
2. Power on self test (POST)
3. System configuration
4. Kernel loading

Options :
89951446659. 1
89951446660. 2
89951446661. 3
89951446662. 4

Question Number : 96 Question Id : 89951411945 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

All of the following are TRUE regarding virtual memory EXCEPT_____.
1. Any amount of RAM can be allocated to virtual memory
2. The setting for the amount of hard disk drive space to allocate virtual memory can manually change
3. This temporary storage is called the swap file or page file.
4. Virtual memory is the physical space on the hard drive

Options :

89951446663. 1

89951446664. 2

89951446665. 3

89951446666. 4

Question Number : 97 Question Id : 89951411946 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The_____operating system was initially created in the early 1970s at AT and T's Bell Labs.
1. Linux
2. DOS
3. Unix
4. GNU

Options :

89951446667. 1

89951446668. 2

89951446669. 3

89951446670. 4

Question Number : 98 Question Id : 89951411947 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the output of the following program?
x = 3; y = 5; z = 10;
if [($x -eq 3) -a ($y -eq 5 -o $z -eq 10)]
then
    echo $x
else
    echo $y
fi

1. 1
2. 3
3. 5
4. Error

Options :

89951446671. 1

89951446672. 2

89951446673. 3

89951446674. 4

Question Number : 99 Question Id : 89951411948 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

If the CPU scheduling policy is FCFS, then what would be the possible average waiting time?
1. 10 ms
2.10.8 ms
3. 12 ms
4. 12.8 ms

Options :

89951446675. 1

89951446676. 2

89951446677. 3

89951446678. 4

Question Number : 100 Question Id : 89951411949 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

What will be output of following command?
$ echo "The process id is" $$$$
1. The process id is $$
2. The process id is $<pid>$<pid>
3. The process id is <pid><pid>
4. The process id is $$$$

Options :

89951446679. 1

89951446680. 2

89951446681. 3

89951446682. 4