



**CS604- Operating Systems**  
**Solved MCQS**  
**From Midterm Papers**

**July 02,2013**

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**FINALTERM EXAMINATION**  
**Spring 2010**  
**CS604- Operating Systems (Session - 4)**

**Question No: 1 ( Marks: 1 ) - Please choose one**

A \_\_\_\_\_ (or an *exception*) is a software-generated interrupt caused either by an error (division by zero or invalid memory access) or by a user request for an operating system service.

- ▶ Interrupt
- ▶ **Trap (Page 7)**
- ▶ Signal
- ▶ Process

**Question No: 2 ( Marks: 1 ) - Please choose one**

Which register holds the smallest legal physical memory address for a process?

- ▶ **Base register (Page 13)**
- ▶ Limit register
- ▶ Status register
- ▶ None of the given options

**Question No: 3 ( Marks: 1 ) - Please choose one**

The process of switching from one process to another is called -----

- ▶ **context switching (Page 34)**
- ▶ scheduling
- ▶ quantum period
- ▶ latency

**Question No: 4 ( Marks: 1 ) - Please choose one**

The -----semaphore provides mutual exclusion for accesses to the buffer pool and is initialized to the value 1.

- ▶ **mutex (Page 118)**
- ▶ binary
- ▶ counting
- ▶ none of the given options

**Question No: 5 ( Marks: 1 ) - Please choose one**

Binary semaphores are those that have only two values-----

- ▶ 0 and n
- ▶ 0 and 0
- ▶ **0 and 1 (Page 117)**
- ▶ None of the given options

**Question No: 6 ( Marks: 1 ) - Please choose one**

Addresses generated *relative* to part of program, not to start of physical memory are

- ▶ Virtual
- ▶ Physical
- ▶ **Relocatable** [Click here for detail](#)
- ▶ Symbolic

**Question No: 7 ( Marks: 1 ) - Please choose one**

Object files and libraries are combined by a ----- program to produce the executable binary

- ▶ Compiler
- ▶ Linker
- ▶ Text editor
- ▶ **Loader** [Click here for detail](#)

**Question No: 8 ( Marks: 1 ) - Please choose one**

Physical memory is broken down into fixed-sized blocks, called----- and Logical memory is divided into blocks of the same size, called -----

- ▶ **Frames, pages (Page 165)**
- ▶ Pages, Frames
- ▶ Frames, holes
- ▶ Holes, segments

**Question No: 9 ( Marks: 1 ) - Please choose one**

A page table needed for keeping track of pages of the page table is called -----

- ▶ 2-level paging
- ▶ **Page directory (Page 173)**
- ▶ Page size
- ▶ Page table size

**Question No: 10 ( Marks: 1 ) - Please choose one**

The address generated by the CPU, after any indexing or other addressing-mode arithmetic, is called a -----  
*address*, and the address it gets translated to by the MMU is called a -----*address*.

- ▶ **Virtual, physical [click here for detail](#)**
- ▶ Hexadecimal, Binary,
- ▶ Valid, invalid
- ▶ Physical, Virtual

**Question No: 11 ( Marks: 1 ) - Please choose one**

Each page is a power of ----- bytes long in paging scheme.

- ▶ 2
- ▶ 3
- ▶ **4 (Page 167)**
- ▶ 5

**Question No: 12 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is a way to establish a connection between the file to be shared and the directory entries of the users who want to have access to this file.

- ▶ **Link (Page 231)**
- ▶ Directory
- ▶ Common Group
- ▶ Access Permission

**Question No: 13 ( Marks: 1 ) - Please choose one**

When a \_\_\_\_\_ link is created, a directory entry for the existing file is created

- ▶ Soft
- ▶ **Hard (Page 227)**
- ▶ Soft or Hard
- ▶ None of the given options



**Question No: 14 ( Marks: 1 ) - Please choose one**

The \_\_\_\_\_ method requires each file to occupy a set of contiguous blocks on the disk.

- ▶ **Contiguous Allocation (Page 236)**
- ▶ Linked Allocation
- ▶ Indexed Allocation
- ▶ None of the given options

**Question No: 15 ( Marks: 1 ) - Please choose one**

Which part of the computer system helps in managing the file and memory management system?

- ▶ **Operating System (Page 5)**
- ▶ Device Drivers
- ▶ Application Software
- ▶ Hardware

**Question No: 16 ( Marks: 1 ) . - Please choose one**

Which of the following is correct definition for wait operation?

▶ **wait(S) { (Page 111)**  
**while(S<=0)**  
**;// no op**  
**S--;**  
**}**

▶ wait(S) {  
S++;  
}

▶ wait(S) {  
while(S>=0)  
;// no op  
S--;  
}

▶ wait(S) {  
S--;  
}

**Question No: 17 ( Marks: 1 ) - Please choose one**

Wrong use of wait and signal operations (in context with semaphores) can cause \_\_\_\_\_ problem(s).

- ▶ Mutual Exclusion
- ▶ Deadlock
- ▶ Bounded Waiting
- ▶ **All of the given options are correct**

**Question No: 18 ( Marks: 1 ) - Please choose one**

If a system is not in a safe state, there can be no deadlocks.

- ▶ True
- ▶ **False (Page 137)**

**Question No: 19 ( Marks: 1 ) - Please choose one**

If a process continues to fault, replacing pages, for which it then faults and brings back in right away. This high paging activity is called \_\_\_\_\_.

- ▶ paging
- ▶ **thrashing (Page 210)**
- ▶ page fault
- ▶ CPU utilization

**Question No: 20 ( Marks: 1 ) - Please choose one**

In \_\_\_\_\_ page replace algorithm we will replace the page that has not been used for the longest period of time.

- ▶ counter based
- ▶ Least Frequently Used
- ▶ FIFO
- ▶ **LRU (Page 202)**

**Question No: 21 ( Marks: 1 ) . - Please choose one**

Overlays are implemented by the \_\_\_\_\_

- ▶ Operating system
- ▶ **Programmer (Page 159)**
- ▶ Kernel
- ▶ Shell

**Question No: 22 ( Marks: 1 ) - Please choose one**

An acyclic graph does not allow directories to have shared subdirectories and files.

- ▶ True
- ▶ **False (Page 225)**

**Question No: 23 ( Marks: 1 ) - Please choose one**

The size of pages and frames are same in logical memory and physical memory respectively.

▶ **True (Page 165)**

▶ False

**Question No: 24 ( Marks: 1 ) - Please choose one**

A modification of free-list approach in free space management is to store the addresses of n free blocks in the first free block. Known as \_\_\_\_\_.

- ▶ counting
- ▶ linked list
- ▶ bit vector

▶ **grouping (Page 243)**

**Question No: 25 ( Marks: 1 ) - Please choose one**

In deadlock detection and recovery algorithm, a deadlock exists in the system if and only if the wait for graph contains a \_\_\_\_\_.

▶ **Cycle (Page 147)**

- ▶ Graph
- ▶ Edge
- ▶ Node

**Question No: 26 ( Marks: 1 ) - Please choose one**

Intel is basically designed for following Operating Systems except \_\_\_\_\_.

▶ **MULTICS (Page 182)**

- ▶ OS/2
- ▶ Windows
- ▶ Linux

**Question No: 27 ( Marks: 1 ) - Please choose one**

Following is NOT true about Virtual memory.

▶ **Virtual memory help in executing bigger programs even greater in size that of main memory.**

▶ Virtual memory makes the processes to stuck when the collective size of all the processes becomes greater than the size of main memory.

▶ Virtual memory also allows files and memory to be shared by several different processes through page sharing.

▶ Virtual memory makes the task of programming easier because the programmer need not worry about the amount of physical memory,



**Question No: 28 ( Marks: 1 ) - Please choose one**

The execution of critical sections must NOT be mutually exclusive

- ▶ True
- ▶ **False (Page 100)**

**Question No: 29 ( Marks: 1 ) - Please choose one**

The critical section problem can be solved by the following except

- ▶ Software based solution
- ▶ **Firmware based solution (Page 101)**
- ▶ Operating system based solution
- ▶ Hardware based solution

**Question No: 30 ( Marks: 1 ) - Please choose one**

The bottom layer in the layered approach of Operating System is-----

- ▶ User interface
- ▶ **Hardware (Page 21)**
- ▶ Kernel
- ▶ None of the given options

**FINALTERM EXAMINATION**  
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**Question No: 1 ( Marks: 1 ) - Please choose one**

You can display the contents (names of files and directories) of a directory in UNIX/Linux directory structure with the ----- command.

- ▶ l
- ▶ s
- ▶ **ls (Page 28)**
- ▶ none of the given options

**Question No: 2 ( Marks: 1 ) - Please choose one**

----- spend more time doing IO than computations

- ▶ short CPU bursts
- ▶ CPU bound processes
- ▶ **IO bound processes** (Page 32)
- ▶ None of the given options

**Question No: 3 ( Marks: 1 ) - Please choose one**

-----*buffer* places no practical limit on the size of the buffer

- ▶ Bounded
- ▶ **Unbounded** (Page 44)
- ▶ Both Unbounded & bounded
- ▶ None of the given options

**Question No: 4 ( Marks: 1 ) - Please choose one**

With -----you use condition variables.

- ▶ Semaphores
- ▶ Read/Write Locks
- ▶ Swaps
- ▶ **Monitor** (Page 126)

**Question No: 5 ( Marks: 1 ) - Please choose one**

Deadlocks can be described more precisely in terms of a directed graph called a system -----

- ▶ Directed graph
- ▶ Critical path
- ▶ **Resource allocation graph** [Click here for detail](#)
- ▶ Mixed graph

**Question No: 6 ( Marks: 1 ) - Please choose one**

The integer value of \_\_\_\_\_ semaphores can not be greater than 1.

- ▶ Counting
- ▶ **Binary** (Page 117)
- ▶ Mutex
- ▶ Bounded buffer



**Question No: 7 ( Marks: 1 ) - Please choose one**

Starvation is infinite blocking caused due to unavailability of resources.

▶ **True (Page 115)**

▶ False

**Question No: 8 ( Marks: 1 ) - Please choose one**

The set of all physical addresses corresponding to the logical addresses is a ----- of the process

▶ **Physical address space (Page 155)**

▶ Process address space

▶ None of the given options

▶ Logical address space

**Question No: 9 ( Marks: 1 ) - Please choose one**

----- indicates size of the page table

▶ translation look-aside buffers

▶ **Page-table length register (PTLR) (Page 169)**

▶ Page-table base register (PTBR)

▶ Page offset

**Question No: 10 ( Marks: 1 ) - Please choose one**

If validation bit is 0, it indicates a/an ----- state of segment.

▶ protected

▶ shared

▶ legal

▶ **illegal (Page 180)**

**Question No: 11 ( Marks: 1 ) - Please choose one**

In ----- allocation scheme free frames are equally divided among processes

▶ **Fixed Allocation (Page 207)**

▶ Proportional Allocation

▶ Priority Allocation

▶ None of the given options

**Question No: 12 ( Marks: 1 ) - Please choose one**

Progress and Bounded Waiting are some of the characteristics to solve the critical section problems.

▶ **True (Page 101)**

▶ False

**Question No: 13 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is used to store data on secondary storage device, e.g., a source program(in C), an executable program.

- ▶ Block Special File
- ▶ Link File
- ▶ **Ordinary File (Page 220)**
- ▶ Directory

**Question No: 14 ( Marks: 1 ) - Please choose one**

The basic purpose of \_\_\_\_\_ is to help the users to utilize the hardware resources for completing different tasks in a simplified manner

- ▶ **Operating system (Page 6)**
- ▶ Application software
- ▶ All Software
- ▶ All of the given

**Question No: 15 ( Marks: 1 ) - Please choose one**

User mode can run the Privileged instructions

- ▶ **True (Page 11)**
- ▶ False

**Question No: 16 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ wastes CPU cycles and hence is a problem in real multiprogramming system.

- ▶ **Busy waiting (Page 13)**
- ▶ Spinlock
- ▶ Critical section
- ▶ Mutex

**Question No: 17 ( Marks: 1 ) - Please choose one**

The \_\_\_\_\_ requires that no reader will be kept waiting unless a writer has already obtained permission to use the shared object.

- ▶ **first readers-writers problem (Page 119)**
- ▶ second readers-writers problem
- ▶ third readers-writers problem
- ▶ fourth readers-writers problem

**Question No: 18 ( Marks: 1 ) - Please choose one**

The process of holding at least one resource and waiting to acquire additional resources that are currently being held by other processes is known as\_\_\_\_\_.

- ▶ Mutual exclusion
- ▶ **Hold and wait (Page 131)**
- ▶ No preemption
- ▶ Circular wait

**Question No: 19 ( Marks: 1 ) - Please choose one**

The condition where a set of blocked processes each holding a resource and waiting to acquire a resource held by another process in the set, is termed as \_\_\_\_\_.

- ▶ **Deadlock (Page 130)**
- ▶ Starvation

**Question No: 20 ( Marks: 1 ) - Please choose one**

Banker's algorithm is used for \_\_\_\_\_

- ▶ **Deadlock avoidance (Page 140)**
- ▶ Deadlock detection
- ▶ Deadlock prevention
- ▶ Deadlock removal

**Question No: 21 ( Marks: 1 ) - Please choose one**

A program can not execute unless whole or necessary part of it resides in the main memory.

- ▶ **True**
- ▶ False

**Question No: 22 ( Marks: 1 ) - Please choose one**

The \_\_\_\_\_ requires that once a writer is ready, that writer performs its write as soon as possible , if a writer waiting to access the object, no new readers may start reading.

- ▶ first readers-writers problem
- ▶ **second readers-writers problem (Page 119)**
- ▶ third readers-writers problem
- ▶ fourth readers-writers problem

**Question No: 23 ( Marks: 1 ) - Please choose one**

Which command, Display permissions and some other attributes for prog1.c in your current directory?

- ▶ **ls -l prog1.c (Page 234)**
- ▶ ls -d prog1.c
- ▶ ls file prog1.c
- ▶ ls -l prog1.c /Directory



**Question No: 24 ( Marks: 1 ) - Please choose one**

In the C-Scan and C-Look algorithms, when the disk head reverses its direction, it moves all the way to the other end, without serving any requests, and then reverses again and starts serving requests.

▶ **True (Page 249)**

▶ False

**Question No: 25 ( Marks: 1 ) - Please choose one**

In paged segmentation, we divide every segment in a process into \_\_\_\_\_pages.

▶ **Fixed size (Page 182)**

▶ Variable size

**Question No: 26 ( Marks: 1 ) - Please choose one**

Intel 80386 used paged segmentation with \_\_\_\_\_ level paging.

▶ One

▶ **Two (Page 185)**

▶ Three

▶ Four

**Question No: 27 ( Marks: 1 ) - Please choose one**

The logical address of Intel 80386 is \_\_\_\_\_

▶ 36 bits

▶ **48 bits (Page 185)**

▶ 64 bits

▶ 128 bits

**Question No: 28 ( Marks: 1 ) - Please choose one**

The Swap instruction which is the hardware solution to synchronization problem does not satisfy the \_\_\_\_\_ condition, hence not considered to be a good solution.

▶ Progress

▶ **Bounded waiting (Page 109)**

▶ Mutual exclusion

▶ None of the given

**Question No: 29 ( Marks: 1 ) - Please choose one**

The -----scheme is not applicable to a resource allocation system with multiple instances of each resource type.

▶ **Wait for graph (Page 148)**

- ▶ Resource allocation graph
- ▶ Both Resource-allocation and wait-for graph
- ▶ None of the given options

**Question No: 30 ( Marks: 1 ) - Please choose one**

The following requirement for solving critical section problem is known as\_\_\_\_\_.

**“There exists a bound on the number of times that other processes are allowed to enter their critical sections after a process has made a request to enter its critical section and before that request is granted.”**

- ▶ Progress
- ▶ **Bounded Waiting (Page 101)**
- ▶ Mutual Exclusion
- ▶ Critical Region

## CS604 Solved Quizzes (Final term)

### Quiz No.2(19-June-2013)

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Consider a scenario in which one process P1 enters in its critical section, no other process is allowed to execute in its critical section. This is called -----

**Mutual exclusion** [Click here for detail](#)

Context switching

Multithreading

Progress

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Following is not the classical problem of synchronization.

Bounded buffer problem

Reader writer problem

Dining philosophers problem

**Counting Semaphore problem** (Page 118)

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Typically monitor, a high level synchronization tool is characterized by \_\_\_\_\_ and \_\_\_\_\_.

Global variable, local variable

Signal, wait

**Local data, programmer defined operators** (Page 125)

Local variables, semaphores

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

The section of code after the critical section is called \_\_\_\_\_.

Crystal section

**Entry section**

Remainder section

Exit section



**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

A process is said to be in critical section if it executes code that manipulates shared data.

**True** (Page 100)

False

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

In producer-Consumer problem synchronization is required. On which shared area this synchronization actually affect?

Counter

**Buffer**

Entry section

Exit section

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Critical section problem can be solved by using how many ways?

4

**3** (Page 101)

1

2

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is an integer variable accessible through wait and signal which are atomic operations.

**Semaphore** (Page 111)

Mutex

Busy waiting

Signal

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Software solution to critical section problem can run only in environment \_\_\_\_\_.

Multiprocessor

Multithreading

Uniprocessor

Separate address spacing

**Question No: 10 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ integer shows the highest priority of a process in CPU scheduling

► **Small** (Page 86)

► Large

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Removing the possibility of deadlock in dining philosopher problem does not ensure the \_\_\_\_\_ problem will not occur.

Mutual Exclusion

**Starvation (Page 123)**

Critical Section

Bounded Buffer

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

The priority of a process can be changed using \_\_\_\_\_ command.

► **nice (Page 94)**

► cmd

► Cat

► grep

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

The integer value of \_\_\_\_\_ semaphores can range over an unrestricted integer domain.

► **Counting (Page 117)**

► Binary

► Mutex

► Bounded buffer

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is a preemptive scheduling algorithm.

► First Come First Serve

► Shortest Job First

► **Round Robin (Page 89)**

► None of these

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ algorithm is used for solving n-process critical section problem.

► Bankers

► **Bakery (Page 105)**

► Babbles

► None of the given

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**Question No: 5 of 10( Marks: 1 ) - Please choose one**

Batch programs are usually \_\_\_\_\_ programs.

- ▶ Interactive
- ▶ **Non-interactive** [click here for detail](#)
- ▶ Foreground
- ▶ Preemptive

**Question No: 1 of 10( Marks: 1 ) - Please choose one**

Using hardware solution to synchronization for complex problems, introduce a new synchronization tool know as \_\_\_\_\_.

TestAndSet

**Semaphore** (Page 111)

Swap

Trap

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Use of semaphore create a problem of busy waiting, this wastes CPU cycles that some other process may be able to use productively. This type of semaphore is also called \_\_\_\_\_

Semaphore S

**Spinlock** (Page 112)

Locking Semaphore

Mutex

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

----- is a segment of code that accesses a shared resource like data structure or device that must not be concurrently accessed by more than one thread of execution.

Multithreading

Context switching

**Critical section** (Page 105)

Pipelining

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Cache is non-volatile memory.

- ▶ True
- ▶ **False** (Page 153)

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**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

While executing the statement c++/c-- in Producer-Consumer problem, at back end certain number of instructions are executed, if interleaving of statements happen, it create race condition. Tell number of instructions that require “no interleaving” while executing c++/c--?

- 3
- 1
- 2
- 0

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The collection of process that is waiting on the disk to be brought into the memory for execution forms the \_\_\_\_\_

► **Input queue** (Page 154)

- Output queue
- Both of the
- None of the above

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is used due to un-used space in fixed size blocks/ pages.

► **Internal fragmentation** [Click here for detail](#)

- External fragmentation
- Paging
- MVT

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Fragmentation when using ICMP for path MTU should be avoided.

► **True**

- False

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Variable name are \_\_\_\_\_ address.

- Physical
- Reloadable
- Relative
- **Symbolic** [Click here for detail](#)

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Secondary storage memory devices have \_\_\_\_ memory.

- ▶ Volatile
- ▶ **Permanent and non volatile** [Click here for detail](#)
- ▶ Temporary
- ▶ None of the

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is caused due to un-used in physical memory.

- ▶ **Internal fragmentation** [Click here for detail](#)
- ▶ External fragmentation
- ▶ Paging
- ▶ MVT

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The run-time mapping from virtual to physical address is done by a piece of hardware in the CPU, called the \_\_\_\_\_

- ▶ **Memory management unit (MMU)** (Page 155)
- ▶ CPU scheduler
- ▶ Registers
- ▶ None of the above

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Main memory is \_\_\_\_\_ memory.

- ▶ **Volatile memory** [Click here for detail](#)
- ▶ Non-volatile
- ▶ Permanent
- ▶ Virtual

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

What do we name to an address that is generated by CPU?

- ▶ **Logical address** (Page 152)
- ▶ Physical address
- ▶ Binary address
- ▶ None of the above

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Address Binding will be at \_\_\_\_\_ in multiprogramming with fixed tasks (MFT)

- ▶ Rub time
- ▶ **Load time (Page 160)**
- ▶ Dynamic time
- ▶ None of the

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In \_\_\_\_\_ technique, memory is divided into several fixed-size partitions.

- ▶ Swapping
- ▶ Overlays
- ▶ **Multiprogramming with fixed tasks (MFT) (Page 159)**
- ▶ Multiprogramming with fixed tasks (MFT)

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is used in the detection and recovery mechanism to handle deadlocks.

- ▶ **Wait-for graph (Page 144)**
- ▶ Resource allocation graph
- ▶ Circular graph
- ▶ Claim edge graph

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

An optimal page-replacement algorithm has the lowest page fault rate of all algorithms.

- ▶ **True (Page 199)**
- ▶ False

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ Point to the page table.

- ▶ Translation look-aside buffers
- ▶ Page offset
- ▶ Page-table length registers (PRLR)
- ▶ **Page-table base registers (PTBR) (Page 166)**

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The segment table maps the \_\_\_\_\_ the physical addresses.

- ▶ Page addresses
- ▶ Shared page addresses
- ▶ One-dimensional logical addresses
- ▶ **Two-dimensional logical addresses (Page 175)**



**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Segmentation is a memory management scheme that support\_\_\_\_\_?

► **Programmer's view of memory (Page 175)**

- System's view of memory
- Hardware's view of memory
- None of the given

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The pager is used in connection with \_\_\_\_\_.

► **Demand paging (Page 186)**

- Paging
- Segmentation
- Page segmentation

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

When the process tries to access locations that are not in memory, the hard traps the operating system. This is called as\_\_\_\_\_.

► **Page fault (Page 188)**

- Page replacement
- Paging
- Segmentation

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The main criteria of page replacement in optimal page replacement algorithm is to\_\_\_\_\_

► **Replacement that page will not be use for the longest period of time (Page 199)**

- Replacement that page will be required most frequently in the execution of process
- Replace the page which is biggest in size.

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

-----refers to the situation when free memory space exists to load a process in the memory but the space is not contiguous.

- Segmentation
- Internal fragmentation
- Swapping
- **External Fragmentation (Page 165)**

**Question 1 of 10 ( Marks: 1 ) - Please choose one**  
\_\_\_\_\_ algorithm is used in Deadlock avoidance.

- ▶ Bakery
- ▶ **Banker's** (Page 139)
- ▶ Mutual exclusion
- ▶ Safe Sequence

**Question 1 of 10 ( Marks: 1 ) - Please choose one**  
-----keep in memory only those instructions and data that are needed at any given time.

- ▶ Fragmentation
- ▶ Paging
- ▶ Swapping
- ▶ **Overlays** (Page 156)

**Question 1 of 10 ( Marks: 1 ) - Please choose one**  
In\_\_\_\_\_, the library files are linked at load time.

- ▶ **Static linking** [Click here for detail](#)
- ▶ Dynamic linking

**Question 1 of 10 ( Marks: 1 ) - Please choose one**  
In swapping technique of Memory Management, the total amount transfer is directly proportional to the \_\_\_\_\_

- ▶ **amount of the memory swapped** [Click here for detail](#)
- ▶ amount of space on backing store
- ▶ space on main memory
- ▶ all the given options are correct

**Question 1 of 10 ( Marks: 1 ) - Please choose one**  
When the address used in a program gets converted to an actual physical RAM address, it is called --  
-----

- ▶ Execution
- ▶ Loading
- ▶ **Address Binding** [Click here for detail](#)
- ▶ Compiling

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

If the system can allocate resources to each process in some order and still avoid a deadlock then it is said to be in \_\_\_\_\_ state.

▶ **Safe** (Page 137)

- ▶ Un-Safe
- ▶ Mutual
- ▶ Starvation

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

----- register contains the size of the process

- ▶ Base register
- ▶ Index register
- ▶ **Limit register** (Page 13)
- ▶ Stack pointers register

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In Resource Allocation Graph, a \_\_\_\_\_  $P_i \rightarrow R_j$  indicates that process  $P_i$  may request resource  $R_j$  at some time in the future.

▶ **Claim edge** (Page 138)

- ▶ Request edge
- ▶ Assignment edge
- ▶ Allocation edge

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

What do we name to an address that is loaded into the memory-address register of the memory?

- ▶ Logical address
- ▶ **Physical address** (Page 155)
- ▶ Binary addresses
- ▶ None of the given options

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The ----- is a single program that produces an object file

- ▶ Linker
- ▶ **Compiler** [Click here for detail](#)
- ▶ Loader
- ▶ Text editor



**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Preventing a condition of \_\_\_\_\_ to happen, deadlocks can be prevented to happen.

- ▶ Critical region
- ▶ **Circular wait (Page 136)**
- ▶ Monitors
- ▶ Critical section

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

A condition where a set of blocked processes each holding a resource and waiting to acquire a resource held by another process in the set is termed as \_\_\_\_\_.

- ▶ **Deadlock (Page 130)**
- ▶ Starvation

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

The following is NOT a classical problem of synchronization

- ▶ Bounded buffer problem
- ▶ Reader writer problem
- ▶ Dining philosopher's problem
- ▶ **Counting semaphore problem (Page 118)**

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The condition in which a set  $\{P_0, P_1 \dots P_n\}$  of waiting processes must exist such that  $P_0$  is waiting for a resource that is held by  $P_1$ ,  $P_1$  is waiting for a resource that is held by  $P_2$ , and so on,  $P_{n-1}$  is waiting for a resource held by  $P_n$ , and  $P_n$  is waiting for a resource held by  $P_0$ . This condition is known as \_\_\_\_\_.

- ▶ Mutual exclusion
- ▶ Hold and wait
- ▶ No preemption
- ▶ **Circular wait (Page 131)**

**Question No: 9 (Marks: 1) - Please choose one**

A semaphore that cause Busy-Waiting is termed as \_\_\_\_\_.

- ▶ **Spinlock (Page 113)**
- ▶ Monitor
- ▶ Critical region
- ▶ Critical section

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

The -----scheme is not applicable to a resource allocation system with multiple instances of each resource type.

► **Wait for graph (Page 148)**

- Resource allocation graph
- Both Resource-allocation and wait-for graph
- None of the given options

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

The \_\_\_\_\_ requires that once a writer is ready, that writer performs its write as soon as possible , if a writer waiting to access the object, no new readers may start reading.

- first readers-writers problem
- **second readers-writers problem (Page 119)**
- third readers-writers problem
- fourth readers-writers problem

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

Starvation is infinite blocking caused due to unavailability of resources.

► **True (Page 115)**

- False

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In pages segmentation, the logical address is legal if d is \_\_\_\_\_segment length.

► **< (less then) (Page 180)**

- >(greater than)
- =(equal to)

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In \_\_\_\_\_ allocation scheme number of frames allocated to a process is proportional to its size .

► **Proportional Allocation (Page 207)**

- Fixed allocation
- Priority allocation
- None of these

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

In Resource Allocation Graph, A \_\_\_\_\_  $P_i \rightarrow R_j$  indicates that process  $P_i$  may request resource  $R_j$  at some time in the future.

► **Claim edge (Page 138)**

- Request edge
- Assignment edge
- Allocation edge

**Question No: 14 ( Marks: 1 ) - Please choose one**

A \_\_\_\_\_ is an integer variable that, apart from initialization is accessible only through two standard atomic operations: wait and signal.

► **Semaphore (Page 111)**

- Monitor
- Critical region
- Critical section

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In case of thrashing if CPU utilization is too low the operating system \_\_\_\_\_ the degree of multiprogramming.

► **Increases (Page 207)**

- Decrease

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

We want a page replacement algorithm with the \_\_\_\_\_ page-fault rate.

► **Lowest (Page 198)**

- Highest

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In a UNIX system, \_\_\_\_\_ system call can be used to request the operating system to memory map an opened file.

► **mmap() (Page 195)**

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The high paging activity is called \_\_\_\_\_

► **Thrashing (Page 207)**



**Question 1 of 10 ( Marks: 1 ) - Please choose one**

The main memory is usually divided into two partitions, one for \_\_\_\_\_ and other for \_\_\_\_\_ .

► **resident operating System, User processes (Page 158)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

A section of code or collection of operations in which only one process may be executing at a given time, is called critical section. Consider a system containing n processes {P0, P1, 2, ..., Pn }. Each process has a segment of code called a \_\_\_\_\_

► **N-Process Critical Section Problem [Click here for detail](#)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Semaphore S is a/an \_\_\_\_\_ type of variable to use as synchronization tool.

► **Integer (Page 111)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

In order to remove the problem like busy waiting, some high level synchronization constructs are defined. What are they?

► **Critical regions and Monitors (Page 124)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

In instruction TestAndSet mutual exclusion implementation is done by declaring a Boolean variable lock \_\_\_\_\_.

► **Initialized as false (Page 109)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

We can use semaphores to deal with the number of \_\_\_\_\_ process critical section problem.

► **n-process critical section problem**

## CS604 – Some More Quizzes

**Question No: 1 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ command to resume the execution of a suspended job in the foreground

▶ **fg (Page 68)**

- ▶ bg
- ▶ jobs
- ▶ kill

**Question No: 2 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ commands in Linux is used to copy file

▶ is

▶ **cp (Page 30)**

- ▶ mv
- ▶ mkdir

**Question No: 3 ( Marks: 1 ) - Please choose one**

The process id returned to the child process after successful fork system call execution is \_\_\_\_\_.

▶ **0 (Page 40)**

- ▶ 1
- ▶ 2
- ▶ 3

**Question No: 4 ( Marks: 1 ) - Please choose one**

In \_\_\_\_\_ addressing, the recipient is not required to name the sender.

▶ Symmetric

▶ **Asymmetric (Page 47)**

- ▶ Both symmetric and asymmetric
- ▶ None of the given options

**Question No: 5 ( Marks: 1 ) - Please choose one**

A solution to the critical section problem must satisfy the following requirements

▶ Progress

▶ Mutual exclusion

▶ Bounded Waiting

▶ **All of these (Page 101)**

**Question No: 6 ( Marks: 1 ) - Please choose one**

Typically the execvp system call is used after a fork system call.

▶ **True** (Page 39)

▶ False

**Question No: 7 ( Marks: 1 ) - Please choose one**

You can create a threads by using the pthread\_create() call.

▶ **True** (Page 76)

▶ False

**Question No: 8 ( Marks: 1 ) - Please choose one**

The interval from the time of submission to the time of completion is the \_\_\_\_\_

▶ **Turnaround time** (Page 83)

▶ Waiting time

▶ Response time

▶ None of all these

**Question No: 9 ( Marks: 1 ) - Please choose one**

Each process must first request permission to enter its critical section. The section of code implementing this request is called the \_\_\_\_\_

▶ **entry section** (Page 100)

▶ Critical Section

▶ remainder section

▶ None of all these

**Question No: 10 ( Marks: 1 ) - Please choose one**

IPC provides a mechanism to allow processes to communicate and to synchronize their actions without sharing the same \_\_\_\_\_

▶ **Address space** (Page 46)

▶ Address Name

▶ Address ID

▶ None of all these

**Question No: 1 (Marks: 1) - Please choose one**

Linux is a version of \_\_\_\_\_ operating system.

▶ OS/2

▶ Windows

▶ **Unix** [click here for detail](#)

▶ None of the above

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**Question No: 2 (Marks: 1) - Please choose one**

Current working directory can be accessed using ----- Command.

- ▶ . (dot)
- ▶ # ( hash )
- ▶ / (slash)
- ▶ ~ (tilt) (Page 25)

**Question No: 3 (Marks: 1) - Please choose one**

Mkfifo() is a \_\_\_\_\_.

- ▶ **Library Call** (Page 58)
- ▶ Command
- ▶ Directory
- ▶ None of Above

**Question No: 4 (Marks: 1) - Please choose one**

\_\_\_\_\_ command gives a snapshot of the current processes.

- ▶ **ps** (Page 66)
- ▶ top
- ▶ who
- ▶ ls

**Question No: 5 (Marks: 1) - Please choose one**

Time interval when the I/O Devices are accessed is known as -----.

- ▶ CPU Burst
- ▶ **IO Burst** [Click here for detail](#)
- ▶ Time Slice
- ▶ None of Above

**Question No: 7 (Marks: 1) - Please choose one**

\_\_\_\_\_ directory includes essential system boot files including the kernel image.

- ▶ /bin
- ▶ **/boot** (Page 26)
- ▶ /dev
- ▶ /etc

**Question No: 8 (Marks: 1) - Please choose one**

\_\_\_\_\_ scheduling algorithm is sometimes called shortest remaining time first scheduling algorithm.

- ▶ Non-preemptive SJF
- ▶ Priority Scheduling
- ▶ **Preemptive Shortest Job First** (Page 85)
- ▶ FCFS

**Question No: 13 (Marks: 1) - Please choose one**

A program in execution is called a \_\_\_\_\_.

- ▶ Command
- ▶ **Process (Page 31)**
- ▶ Software
- ▶ Compiler

**Question No: 16 (Marks: 1) - Please choose one**

The manual pages can be read in Linux using \_\_\_\_\_ command.

- ▶ **man (Page 27)**
- ▶ wan
- ▶ desc
- ▶ help

**Question No: 1 ( Marks: 1 ) - Please choose one**

The hardware mechanism that enables a device to notify CPU is called an -----

- ▶ **Interrupt [click here for detail](#)**
- ▶ Signal
- ▶ Trap
- ▶ Process

**Question No: 3 ( Marks: 1 ) - Please choose one**

The ----- system call suspends the calling process.

- ▶ fork
- ▶ **wait (Page 42)**
- ▶ exec
- ▶ exit

**Question No: 7 ( Marks: 1 ) - Please choose one**

You can use the ----- command to display the status of suspended and background processes

- ▶ fg
- ▶ bg
- ▶ **jobs (Page 68)**
- ▶ kill

**Question No: 8 ( Marks: 1 ) - Please choose one**

You can terminate a foreground process by pressing -----

- ▶ <Ctrl-A>
- ▶ **<Ctrl-C>** (Page 69)
- ▶ <Ctrl-Z>
- ▶ None of the given options

**Question No: 9 ( Marks: 1 ) - Please choose one**

A time sharing system is

- ▶ Multi tasking
- ▶ Interactive
- ▶ Multi user
- ▶ **All of these** (Page 9)

**Question No: 10 ( Marks: 1 ) - Please choose one**

The main characteristic of a Real time system is

- ▶ Efficiency
- ▶ Large Virtual Memory
- ▶ Large secondary storage device
- ▶ **Usability** [click here for detail](#)

**Question No: 11 ( Marks: 1 ) - Please choose one**

Shared libraries and kernel modules are stored in directory

- ▶ /bin
- ▶ /dev
- ▶ /boot
- ▶ **/lib** (Page 26)

**Question No: 12 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_scheduler selects the process from the job pool and put them in main memory.

- ▶ **Long term** (Page 36)
- ▶ Short term
- ▶ Medium term
- ▶ Swapper

**Question No: 13 ( Marks: 1 ) - Please choose one**

In indirect inter process communication, a sender\_\_\_\_\_mention the name of the recipient.

- ▶ do
- ▶ **do not** (Page 47)



**Question No: 17 ( Marks: 1 ) - Please choose one**

The performance of Round Robin algorithm does NOT depends heavily on the size of the time quantum.

▶ **True (Page 89)**

▶ False

**Question No: 20 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is also called Swapper.

▶ Swap space

▶ **Medium term scheduler (Page 37)**

▶ Short term scheduler

▶ Long term scheduler

**Question No: 1 ( Marks: 1 ) - Please choose one**

Linux OS can support multiple users at a time

▶ **True (Page 9)**

▶ False

**Question No: 2 ( Marks: 1 ) - Please choose one**

The Operating system is a layer of software between \_\_\_\_\_ and \_\_\_\_\_.

▶ **hardware, software application (Page 21)**

▶ Kernel, hardware

▶ Dos, Windows

▶ Windows, Kernel

**Question No: 3 ( Marks: 1 ) - Please choose one**

The major advantage of multi-programming system is

▶ More than one jobs can be processed at a given time

▶ **CPU utilization can be increased (Page 8)**

▶ Jobs can be completed quickly

▶ All of the options are correct

**Question No: 5 ( Marks: 1 ) - Please choose one**

Command-line interpreter is also called \_\_\_\_\_ in some operating systems.

▶ Kernel

▶ **Shell (Page 16)**

▶ Signal

▶ API

**Question No: 6 ( Marks: 1 ) - Please choose one**

I/O instructions are Privileged Instructions.

▶ **True (Page 12)**

▶ False

**Question No: 7 ( Marks: 1 ) - Please choose one**

In Linux directory structure, there is \_\_\_\_\_ root directory.

▶ **1 (Page 26)**

▶ 2

▶ 3

▶ 4

**Question No: 8 ( Marks: 1 ) - Please choose one**

Utilities used for system administration (halt, ifconfig, fdisk, etc.) are stored in \_\_\_\_\_ directory.

▶ /dev

▶ /boot

▶ /lib

▶ **/sbin (Page 27)**

**Question No: 9 ( Marks: 1 ) - Please choose one**

rm and [r]mkdir commands are used to \_\_\_\_\_ directory.

▶ Create

▶ Move

▶ **Remove (Page 30)**

▶ Modify

**Question No: 10 ( Marks: 1 ) - Please choose one**

You can use the mv file1 file2 command to move \_\_\_\_\_

▶ **file1 to file2. (Page 30)**

▶ file 2 to file 1

▶ this command will not work for moving files

▶ None of the option is correct.

▶ Both option a and b are correct

**Question No: 11 ( Marks: 1 ) - Please choose one**

Taking the CPU from one process and giving the CPU to another process is termed as

▶ **Context Switching [click here for detail](#)**

▶ Dispatching

▶ Swapping

▶ Tracking

**Question No: 12 ( Marks: 1 ) - Please choose one**

A Process that has finished working, as well as its parent process has also finished its execution. In this state the process A will be called as \_\_\_\_\_ process.

- ▶ **Child**
- ▶ Thread
- ▶ Zombie
- ▶ Fork

**Question No: 13 ( Marks: 1 ) - Please choose one**

Bounded Buffer is a buffer of \_\_\_\_\_ size

- ▶ variable
- ▶ **fixed** (Page 44)

**Question No: 14 ( Marks: 1 ) - Please choose one**

In \_\_\_\_\_ communication the process which wants to communicate with the other process must explicitly name the recipient and the sender.

- ▶ **Direct** (Page 46)
- ▶ Indirect
- ▶ Automatic
- ▶ Self

**Question No: 17 ( Marks: 1 ) - Please choose one**

If the fork system call fails, it returns

- ▶ 1
- ▶ **-1** (Page 40)
- ▶ 2
- ▶ 0

**Question No: 18 ( Marks: 1 ) - Please choose one**

When a process opens its first file explicitly it will get descriptor number \_\_\_\_\_

- ▶ 1
- ▶ 2
- ▶ **3** [click here for detail](#)
- ▶ 4

**Question No: 1 ( Marks: 1 ) - Please choose one**

1 MB or 1 megabyte is equivalent to----

- ▶ 1024 bytes
- ▶  **$1024^2$  bytes** [click here for detail](#)
- ▶  $1024^3$  bytes
- ▶ 1000000 bytes



**Question No: 3 ( Marks: 1 ) - Please choose one**

-----has a hierarchical file system structure.

- ▶ DOS
- ▶ Windows
- ▶ **UNIX (Page 25)**
- ▶ None of the given options

**Question No: 4 ( Marks: 1 ) - Please choose one**

You can use the -----command in UNIX to create a directory.

- ▶ rmdir
- ▶ **mkdir (Page 29)**
- ▶ cp
- ▶ gcc

**Question No: 5 ( Marks: 1 ) - Please choose one**

Files that start with a ----- in UNIX/Linux directory structure are known as hidden files .

- ▶ **.(dot) (Page 28)**
- ▶ # ( hash )
- ▶ / (slash)
- ▶ ~ (tilt)

**Question No: 6 ( Marks: 1 ) - Please choose one**

The creating process is called a----- process while the new processes are called the ----- of that process

- ▶ None of the given options
- ▶ Children, parent
- ▶ **Parent, children (Page 38)**
- ▶ Zombie, single

**Question No: 8 ( Marks: 1 ) - Please choose one**

The \_\_\_\_\_ are used for communication between related or unrelated processes on the same system or unrelated processes on different systems.

- ▶ Pipes
- ▶ **BSD Sockets (Page 53)**
- ▶ Named pipe (FIFO)
- ▶ None of the given options

**Question No: 9 ( Marks: 1 ) - Please choose one**

A\_\_\_\_\_ is an abstract key for accessing a file.

► **File descriptor** [click here for detail](#)

- Input Redirection
- Output Redirection
- FIFO

**Question No: 11 ( Marks: 1 ) - Please choose one**

You can display all of the signals supported by your system, along with their numbers, by using the ----- command

- <Ctrl-A>
- fg
- jobs
- **kill -l** (Page 69)

**Question No: 12 ( Marks: 1 ) - Please choose one**

The time it takes for the dispatcher to stop one process and start another running is known as the-----.

► **Dispatch latency** (Page 82)

- Scheduling
- Context switching
- None of the given options

**Question No: 13 ( Marks: 1 ) - Please choose one**

First-Come, First-Served (FCFS) is a -----scheduling algorithm.

- preemptive
- **non-preemptive** (Page 83)
- both preemptive and non- preemptive
- none of the given options

**Question No: 14 ( Marks: 1 ) - Please choose one**

The Shortest-Job-First Scheduling algorithm can be

- Preemptive only
- non-preemptive only
- **preemptive or non-preemptive.** (Page 85)
- None of the given options

**Question No: 15 ( Marks: 1 ) - Please choose one**

Preemptive -----scheduling is sometimes called shortestremaining-time-first scheduling.

- ▶ First-Come-First-Served (FCFS)
- ▶ Round-Robin
- ▶ **Sorted Job First (SJF) (Page 85)**
- ▶ Priority

**Question No: 17 ( Marks: 1 ) - Please choose one**

OS helps manages the following except

- ▶ Application software
- ▶ **Bus speed of the system [Click here for detail](#)**
- ▶ Memory
- ▶ Virtual memory

**Question No: 19 ( Marks: 1 ) - Please choose one**

A parent process calling \_\_\_\_\_ system call will be suspended until children process terminates.

- ▶ **wait [click here for detail](#)**
- ▶ fork
- ▶ exit
- ▶ exec

**Question No: 20 ( Marks: 1 ) - Please choose one**

n-process critical section problem can be solved by using

- ▶ **The bakery algorithm (Page 105)**
- ▶ Deterministing modeling
- ▶ Analytic evaluation
- ▶ None of above

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is a piece of code in a cooperating process in which the process may updates shared data (variable, file, database, etc.).

- ▶ Critical analysis
- ▶ **Critical section (Page 100)**
- ▶ Critical path
- ▶ Critical code



**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

Round Robin algorithm is similar to \_\_\_\_\_ scheduling but preemption is added to switch between processes.

- ▶ Shortest job first
- ▶ Shortest Remaining Time First
- ▶ **First Come First Server (Page 88)**
- ▶ None of these

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**

DOS is single user operating system.

- ▶ **True (Page 7)**
- ▶ False

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

When process opens its first file explicitly it will get descriptor number \_\_\_\_\_

- ▶ 1
- ▶ 2
- ▶ **3 [Click here for detail](#)**
- ▶ 4

**Question No: 6 of 10 ( Marks: 1 ) - Please choose one**

A major problem with priority scheduling algorithms is \_\_\_\_\_.

- ▶ Deadlock
- ▶ Aging
- ▶ **Starvation (Page 86)**
- ▶ None of the these

**Question No: 7 of 10 ( Marks: 1 ) - Please choose one**

All threads within a process share the \_\_\_\_\_ address space.

- ▶ Same
- ▶ **Different (Page 71)**

**Question No: 8 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ displays information about the top processes.

- ▶ Is
- ▶ Cs
- ▶ **Top (Page 67)**
- ▶ Cd

**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

The scheduling of \_\_\_\_\_ are done by the operating system.

► **Kernel threads (Page 73)**

- User level threads
- Both kernel and user level thread
- None of the give option

**Question No: 10 of 10 ( Marks: 1 ) - Please choose one**

In Unix/ Linux, by default the standard output file is attached to the \_\_\_\_\_

- File
- **Screen (Page 59)**
- Printer
- Scanner

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

POSIX is a standard developed by ANSI

- IEEE (not sure)
- **ISO**
- ACM

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is the basis of queuing theory which is branch of mathematics used to analyze systems involving queues and servers.

► **Little's Formula (Page 96)**

- Deterministic modeling
- Queuing Theory
- Queuing Analysis

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is a solution to the problem of indefinite blockage of low-priority processes.

- Starvation
- Deadlock
- **Aging (Page 87)**
- None of the these

**Question No: 6 of 10 ( Marks: 1 ) - Please choose one**

A process consists of \_\_\_\_\_

- One or more threads
- Code
- Data
- **All of the given [click here for detail](#)**

**Question No: 7 of 10 ( Marks: 1 ) - Please choose one**

/usr/X11R6 is used by the X Window System.

▶ **True (Page 27)**

▶ False

**Question No: 8 of 10 ( Marks: 1 ) - Please choose one**

command displays the contents of current working directory.

▶ **Is (Page 28)**

▶ Cs

▶ Mv

**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

Linux uses \_\_\_\_\_ directory to store system configuration files.

▶ /bin

▶ /dev

▶ /boot

▶ **/etc (Page 26)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

If your processor does not have two slots empty in Per Process File Descriptor Table, then your \_\_\_\_\_ system call will fail.

▶ **Pipe (Page 55)**

▶ read

▶ write

▶ open

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

First \_\_\_\_\_ entries in Per Process File Descriptor Table are used as soon as the process is created.

▶ 1

▶ 2

▶ 3

▶ **4 (Page 54)**

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**

The number of processes completed per unit time is called \_\_\_\_\_.

▶ Turn around time

▶ **Throughput (Page 83)**

▶ Response time

▶ Dispatch latency



**Question No: 4 of 10 ( Marks: 1 ) - Please choose one**

The procedure “The time at which the process finished working MINUS the arrival time of the process MINUS CPU burst for that process” will help calculate the \_\_\_\_\_.

- ▶ on-preemptive Shortest Job First scheduling.
- ▶ **Preemptive Shortest Job First scheduling. (Page 85)**
- ▶ FCFS
- ▶ RR Scheduling

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

/opt is used for storage of large applications.

- ▶ **True (Page 27)**
- ▶ False

**Question No: 6 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is a virtual directory in Linux and Unix.

- ▶ **/proc (Page 27)**
- ▶ /temp
- ▶ /ver
- ▶ /boot

**Question No: 7 of 10 ( Marks: 1 ) - Please choose one**

The Home Directory for superuser in Linux and Unix is

- ▶ /home
- ▶ **/root (Page 27)**
- ▶ None of the given

**Question No: 8 of 10 (Marks: 1) - Please choose one**

Linux Treats Devices as Files.

- ▶ **True (Page 26)**
- ▶ False

**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

An absolute pathname starts with the root directory (/) and a relative pathname starts with your home directory.

- ▶ **True (Page 25)**
- ▶ False

**Question No: 10 of 10 ( Marks: 1 ) - Please choose one**

A pathname is the list of directories separated by \_\_\_\_\_.

- ▶ #
- ▶ \$
- ▶ &
- ▶ **/ (Page 25)**

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**  
\_\_\_\_\_ determines How to do something.

- ▶ **Mechanism (Page 24)**
- ▶ Policy
- ▶ Mechanism and Policy:
- ▶ None of the given

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**  
User Goal of OS is that It easy to use, reliable, safe and fast.

- ▶ **True (Page 24)**
- ▶ False

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**  
We can install and run multiple OS by using VMWare.

- ▶ **True [click here for detail](#)**
- ▶ False

**Question No: 4 of 10 ( Marks: 1 ) - Please choose one**  
Mach, MacOS X Server, QNX, OS/2 and Windows NT are examples of OS Based on \_\_\_\_\_.

- ▶ Layered
- ▶ **Micro Kernal (Page 22)**
- ▶ Virtual Machine
- ▶ None of The Given

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**  
In Layered Approach of OS, the Layer highest Layer is User Interface layer.

- ▶ **True (Page 21)**
- ▶ False

**Question No: 6 of 10 ( Marks: 1 ) - Please choose one**  
In Layered approach of OS, Lowest Layer is known as \_\_\_\_\_.

- ▶ Software Layer
- ▶ **Hardware Layer (Page 21)**
- ▶ Lower Level Layer
- ▶ None of The Given

**Question No: 7 of 10 ( Marks: 1 ) - Please choose one**  
Operating System is the Manager of Hardware Resources.

- ▶ **True (Page 6)**
- ▶ False

**Question No: 8 of 10 ( Marks: 1 ) - Please choose one**

An operating system is a control program that manages the execution of user programs to prevent errors and improper use of a computer.

▶ **True (Page 6)**

▶ False

**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

The bottom-up view is that operating system is a resource manager who manages the hardware and software resources in the computer system.

▶ **True (Page 6)**

▶ False

**Question No: 10 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ determines What will be done.

▶ Mechanism

▶ **Policy (Page 24)**

▶ Mechanism and Policy

▶ None of the given

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

copy file1 file2 is an example of \_\_\_\_\_ OS view.

▶ **Top down (Page 6)**

▶ Bottum Up

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

The Top-down view is that it is a program that acts as an intermediary between a user of a computer and the computer hardware, and makes the computer system convenient to use.

▶ **True (Page 6)**

▶ False

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**

Managing Secondary Storage Involves all of the Following except

▶ Allocating storage space

▶ Deallocating Storage

▶ **Prevent Overwritting (Page 5)**

▶ Insure integrity of shared data



**Question No: 4 of 10 ( Marks: 1 ) - Please choose one**

The Purpose of Operating System is to generate Executable Programs and to \_\_\_\_\_ them.

- ▶ Regenetrare
- ▶ **Execute (Page 5)**
- ▶ Store
- ▶ Remove

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

Users are the People, machines or computers that uses the Hardware resources.

- ▶ **True (Page 4)**
- ▶ False

**Question No: 6 of 10 ( Marks: 1 ) - Please choose one**

Database, Compiler, Video games are examples of \_\_\_\_\_.

- ▶ Hardware
- ▶ **Application (Page 4)**
- ▶ Operating System
- ▶ Users

**Question No: 7 of 10 ( Marks: 1 ) - Please choose one**

Which of the Following is not an Operating System.

- ▶ Linux
- ▶ Unix
- ▶ Windows Xp
- ▶ **Datebase (Page 7)**

**Question No: 8 of 10 ( Marks: 1 ) - Please choose one**

Operating system enables the user to use the Hardware Resources.

- ▶ **True (Page 4)**
- ▶ False

**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

Which of the following is NOT a Hardware Resource.

- ▶ CPU
- ▶ **OS (Page 4)**
- ▶ I/O Devices
- ▶ Memory

**Question No: 10 of 10 (Marks: 1) - Please choose one**

Hardware provide basic computing resource.

▶ **True (Page 4)**

▶ False

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

The priorities of processes in the \_\_\_\_\_ group remain fixed.

▶ **Kernel (Page 93)**

▶ User

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**

The process of switching from one process to another is called latency.

▶ True

▶ **False (Page 34)**

**Question No: 4 of 10 ( Marks: 1 ) - Please choose one**

In Unix/ Linux, by default the standard input file is attached to the \_\_\_\_\_

▶ Mouse

▶ **Keyboard (Page 55)**

▶ Light pen

▶ Joystick

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

The nice value helps in assigning \_\_\_\_\_ to a process.

▶ **Priority (Page 94)**

▶ Weight

▶ Time

▶ Scheduling

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

You can use the rm file1 command to \_\_\_\_\_ file1

▶ Retrieve

▶ **Remove (Page 30)**

▶ Make

▶ modify

**Question No: 2 of 10 ( Marks: 1 ) - Please choose one**

The correct command for compiling C program named program.c in Linux environment is

▶ **gcc program.c -o FirstPrgram (Page 31)**

▶ gcc -o FirstProgram program.c

▶ gcc -z FirstProgram program.c

▶ gcc program.c -m FirstPrgram

**Question No: 3 of 10 ( Marks: 1 ) - Please choose one**

Using \_\_\_\_\_ system, we can create a new process in Linux.

▶ **Fork (Page 39)**

- ▶ exec
- ▶ wait
- ▶ exit

**Question No: 4 of 10 ( Marks: 1 ) - Please choose one**

Cooperating processes never share any data, code, memory or state.

▶ True

▶ **False (Page 5)**

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ command display the status of a process.

▶ ls

▶ **ps (Page 66)**

- ▶ gcc
- ▶ cat

**Question No: 6 of 10 ( Marks: 1 ) - Please choose one**

Swapper is also termed as Short term scheduler.

▶ True

▶ **False (Page 36)**

**Question No: 7 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ system call is used to write to a file or FIFO or any other IPC channel.

▶ read

▶ **write (Page 48)**

- ▶ open
- ▶ fork

**Question No: 8 of 10 ( Marks: 1 ) - Please choose one**

A Process 'A' that has finished working but its parent process has also finished its execution. In this state the process 'A' will be called as \_\_\_\_\_ process.

▶ Child

▶ Thread

▶ **Zombie (Page 42)**

▶ Fork



**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ scheduling allows a process to move between queues.

- ▶ Round Robin
- ▶ First Come First Serve
- ▶ **Multilevel Feedback Queue (Page 92)**
- ▶ Shortest Remaining Time First

**Question No: 10 of 10 ( Marks: 1 ) - Please choose one**

Round Robin algorithm is most suitable for \_\_\_\_\_.

**Time sharing system (Page 88)**

Real time systems and batch systems  
Running Batch programs  
Expert system

**Question No: 1 of 10 ( Marks: 1 ) - Please choose one**

Kernel is responsible for scheduling the user level threads.

- ▶ True
- ▶ **False (Page 73)**

**Question No: 9 of 10 ( Marks: 1 ) - Please choose one**

A system call \_\_\_\_\_

- ▶ **Is an entry point into the kernel code (Page 18)**
- ▶ Allows a program to request a kernel service
- ▶ Is a technique to protect I/O devices and other system resources
- ▶ All of the these

**Question No: 4 of 10 ( Marks: 1 ) - Please choose one**

Operating System provides services such as Managing Primary and Secondary Storage, Processes and Allowing user to manage his/her files and directories.

- ▶ **True (Page 5)**
- ▶ False

**Question No: 5 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is used in real time operating systems.

- ▶ **Non-preemptive scheduling [Click here for detail](#)**
- ▶ Preemptive scheduling
- ▶ Dispatching scheduling
- ▶ FCFS scheduling

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**Question 1 of 10 ( Marks: 1 ) - Please choose one**

Deadlock detection and recovery technique is exactly similar to deadlock avoidance technique to handle deadlock in the system.

- ▶ True
- ▶ False

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

In Overlay technique, we can overload any part of the program with the part of the program required needed recently.

- ▶ True
- ▶ False

**Question 1 of 10 ( Marks: 1 ) - Please choose one**

\_\_\_\_\_ is the process of mapping a name to an address.

- ▶ Addressing
- ▶ Binding
- ▶ Routing
- ▶ Memory