



**CS604- Operating Systems**  
**Solved MCQS**  
**From Final term Papers**

**July 10,2013**

**MC100401285**

***Moaaz.pk@gmail.com***

***Mc100401285@gmail.com***

**PSMD01**

**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

دنیا میں سب سے مشکل کام اپنی اصلاح اور سب سے آسان کام دوسروں پر نکتہ چینی کرنا ہے

**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

اللہ کا خوف سب سے بڑی دانائی ہے

**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--;  
}

برى صحبت سے تنہائی بہتر ہے اور تنہائی سے نیک صحبت بہتر ہے

**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

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

**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

ایماندار کو غصہ دیر سے آتا ہے اور جلدی دور ہو جاتا ہے

**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

زندگی میں کامیابی کا یہی راز ہے کہ پریشانیوں سے پریشان مت بنو

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**



**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

دنیا کی سب سے بڑی فتح نفس پر قابو رکھنا ہے

**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

جھوٹ انسان اور ایمان دونوں کا دشمن ہے

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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)

عقل مند کہتا ہے میں کچھ نہیں جانتا جبکہ بے وقوف کہتا ہے کہ میں سب کچھ جانتا ہوں

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**



**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](#)

خود کو تمہیں سے بڑھ کر کوئی اچھا مشورہ نہیں دے سکتا

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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

جو شخص ناکامیوں سے ڈر کر بھاگتا ہے کامیابی اُس سے ڈر کر بھاگتی ہے

**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)**

جو لوگوں کے سامنے فخر کرتا ہے وہ لوگوں کی نظروں سے گر جاتا ہے

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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

عقل مند اپنے عیب خود دیکھتا ہے اور بیوقوفوں کے عیب دنیا دیکھتی ہے

**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 \_\_\_\_\_Pi --->Rj indicates that process Pi may request resource Rj 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 than) (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

بد صورت چہرہ بد صورت دماغ سے بہتر ہے

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**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**

عقل مند آدمی اس وقت تک نہیں بولتا جب تک خاموشی نہیں ہو جاتی

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

## 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)**

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

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

Typically the execlp 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: 11 (Marks: 1) - Please choose one**

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

▶ OS/2

▶ Windows

▶ **Unix** [click here for detail](#)

▶ None of the above



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

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

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

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

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

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

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

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

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

**Question No: 15 (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: 16 (Marks: 1) - Please choose one**

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

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

**Question No: 17 (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: 18 (Marks: 1) - Please choose one**

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

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

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

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

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

**Question No: 20 ( 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: 21 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 22 ( 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

انسان دکھ نہیں دیتے بلکہ انسانوں سے وابستہ امیدیں دکھ دیتی ہیں

**Question No: 23 ( 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: 24 ( Marks: 1 ) - Please choose one**

A time sharing system is

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

**Question No: 25 ( 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: 26 ( Marks: 1 ) - Please choose one**

Shared libraries and kernel modules are stored in directory

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

**Question No: 27 ( 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: 28 ( 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: 29 ( 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: 30 ( Marks: 1 ) - Please choose one**

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

▶ Swap space

▶ **Medium term scheduler (Page 37)**

▶ Short term scheduler

▶ Long term scheduler

**Question No: 31 ( Marks: 1 ) - Please choose one**

Linux OS can support multiple users at a time

▶ **True (Page 9)**

▶ False

**Question No: 32 ( 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: 33 ( 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: 34 ( Marks: 1 ) - Please choose one**

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

▶ Kernel

▶ **Shell (Page 16)**

▶ Signal

▶ API

**Question No: 35 ( Marks: 1 ) - Please choose one**

I/O instructions are Privileged Instructions.

▶ **True (Page 12)**

▶ False

**Question No: 36 ( Marks: 1 ) - Please choose one**

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

▶ **1 (Page 26)**

▶ 2

▶ 3

▶ 4

**Question No: 37 ( 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: 38 ( Marks: 1 ) - Please choose one**

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

▶ Create

▶ Move

▶ **Remove (Page 30)**

▶ Modify

**Question No: 39 ( 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: 40 ( 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: 41 ( 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: 42 ( Marks: 1 ) - Please choose one**

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

- ▶ variable
- ▶ **fixed** (Page 44)

**Question No: 43 ( 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: 44 ( Marks: 1 ) - Please choose one**

If the fork system call fails, it returns

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

**Question No: 45 ( 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: 46( Marks: 1 ) - Please choose one**

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

- ▶ 1024 bytes
- ▶ **1024<sup>2</sup> bytes** [click here for detail](#)
- ▶ 1024<sup>3</sup> bytes
- ▶ 1000000 bytes



**Question No: 47 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 48 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 49 ( 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: 50 ( 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: 51 ( 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: 52** ( 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: 53** ( 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: 54** ( 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: 55** ( 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: 56** ( 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

بہترین تجربہ وہ ہے جس سے نصیحت حاصل ہو

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Modern Studies  
(IEMS) Samundari**

**Question No: 57 ( 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: 58 ( 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: 59 ( 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: 60 ( 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: 61 ( 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

خوبصورتی علم و ادب سے ہوتی ہے لباس و حسن سے نہیں



**Question No: 62 ( 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: 63 ( Marks: 1 ) - Please choose one**

DOS is single user operating system.

- ▶ **True (Page 7)**
- ▶ False

**Question No: 64 ( 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: 65 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 66 ( Marks: 1 ) - Please choose one**

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

- ▶ Same
- ▶ **Different (Page 71)**

**Question No: 67 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 68 ( 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: 69 ( 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: 70 ( Marks: 1 ) - Please choose one**

POSIX is a standard developed by ANSI

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

**Question No: 71 ( 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: 72 ( 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: 73 ( Marks: 1 ) - Please choose one**

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

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

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Moderen Studies  
(IEMS) Samundari**

**Question No: 74 ( Marks: 1 ) - Please choose one**

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

► **True (Page 27)**

► False

**Question No: 75 ( Marks: 1 ) - Please choose one**

command displays the contents of current working directory.

► **Is (Page 28)**

► Cs

► Mv

**Question No: 76 ( Marks: 1 ) - Please choose one**

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

► /bin

► /dev

► /boot

► **/etc (Page 26)**

**Question No: 77 ( 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: 78 ( 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: 79 ( 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: 80 ( 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: 81 ( Marks: 1 ) - Please choose one**

/opt is used for storage of large applications.

- ▶ **True (Page 27)**
- ▶ False

**Question No: 82 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 83 ( 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: 84 (Marks: 1) - Please choose one**

Linux Treats Devices as Files.

- ▶ **True (Page 26)**
- ▶ False

**Question No: 85 ( 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: 86 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 87 ( Marks: 1 ) - Please choose one**  
\_\_\_\_\_ determines How to do something.

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

**Question No: 88 ( 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: 89 ( Marks: 1 ) - Please choose one**  
We can install and run multiple OS by using VMWare.

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

**Question No: 90 ( 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: 91 ( Marks: 1 ) - Please choose one**  
In Layered Approach of OS, the Layer highest Layer is User Interface layer.

- ▶ **True (Page 21)**
- ▶ False

**Question No: 92 ( 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: 93 ( Marks: 1 ) - Please choose one**  
Operating System is the Manager of Hardware Resources.

- ▶ **True (Page 6)**
- ▶ False

**Question No: 94 ( 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: 95 ( 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: 96 ( Marks: 1 ) - Please choose one**

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

► Mechanism

► **Policy (Page 24)**

► Mechanism and Policy

► None of the given

**Question No: 97 ( Marks: 1 ) - Please choose one**

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

► **Top down (Page 6)**

► Bottum Up

**Question No: 98 ( 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: 99 ( 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

تم اچھا کرو زمانہ تم کو برا سمجھے یہ اس سے بہتر ہے کہ تم برا کرو اور زمانہ تم کو اچھا سمجھے

**Muhammad Moaaz Siddiq – MCS(4th)**

**Moaaz.pk@gmail.com**

**Campus:- Institute of E-Learning & Moderen Studies  
(IEMS) Samundari**



**Question No: 100 ( 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: 101 ( Marks: 1 ) - Please choose one**

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

- ▶ **True (Page 4)**
- ▶ False

**Question No: 102 ( Marks: 1 ) - Please choose one**

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

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

**Question No: 103 ( Marks: 1 ) - Please choose one**

Which of the Following is not an Operating System.

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

**Question No: 104 ( Marks: 1 ) - Please choose one**

Operating system enables the user to use the Hardware Resources.

- ▶ **True (Page 4)**
- ▶ False

**Question No: 105 ( Marks: 1 ) - Please choose one**

Which of the following is NOT a Hardware Resource.

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

**Question No: 106 (Marks: 1) - Please choose one**

Hardware provide basic computing resource.

▶ **True (Page 4)**

▶ False

**Question No: 107 ( Marks: 1 ) - Please choose one**

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

▶ **Kernel (Page 93)**

▶ User

**Question No: 108 ( Marks: 1 ) - Please choose one**

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

▶ True

▶ **False (Page 34)**

**Question No: 109 ( 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: 110 ( Marks: 1 ) - Please choose one**

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

▶ **Priority (Page 94)**

▶ Weight

▶ Time

▶ Scheduling

**Question No: 111 ( Marks: 1 ) - Please choose one**

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

▶ Retrieve

▶ **Remove (Page 30)**

▶ Make

▶ modify

**Question No: 112 ( 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: 113 ( Marks: 1 ) - Please choose one**

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

▶ **Fork (Page 39)**

- ▶ exec
- ▶ wait
- ▶ exit

**Question No: 114 ( Marks: 1 ) - Please choose one**

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

▶ True

▶ **False (Page 5)**

**Question No: 115 ( Marks: 1 ) - Please choose one**

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

▶ ls

▶ **ps (Page 66)**

- ▶ gcc
- ▶ cat

**Question No: 116 ( Marks: 1 ) - Please choose one**

Swapper is also termed as Short term scheduler.

▶ True

▶ **False (Page 36)**

**Question No: 117 ( 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: 118 ( 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: 119 ( 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: 120 ( 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: 121 ( Marks: 1 ) - Please choose one**

Kernel is responsible for scheduling the user level threads.

- ▶ True
- ▶ **False (Page 73)**

**Question No: 122 ( 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: 123 ( 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: 124 ( 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

**Question 125 ( 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 126 ( 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 127 ( Marks: 1 ) - Please choose one**

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

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

جھوٹ رزق کو کھا جاتا ہے

اس سے پہلے کہ تمہیں شہوت فتنے میں ڈالے نکاح کر لو

انسان کے لئے بری صحبت سے بڑھ کر بری کوئی چیز نہیں