1. **Which of the following is the creation of a virtual rather than actual version of an operating system?**
   A. Compression
   B. Virtualization
   C. Synchronization
   D. Multithreading
   E. None of these

   Answer & Explanation

   B. Virtualization
   Explanation:
   Virtualization is the creation of a virtual rather than actual version of an operating system.

2. **Which of the following is the primary and first installed operating system.?**
   A. Guest OS
   B. Host OS
   C. Common OS
   D. Shared OS
   E. None of these

   Answer & Explanation

   B. Host OS
   Explanation:
   Host OS is the primary and first installed operating system

3. **Which is a virtual machine (VM) that is installed under the host operating system?**
   A. Guest OS
   B. Network OS
   C. Common OS
   D. Shared OS
   E. None of these

   Answer & Explanation

   A. Guest OS
   Explanation:
   Guest OS is a virtual machine (VM) that is installed under the host operating system

4. **Which of the following is an operating system with ability to handle multiple interrupts concurrently?**
   A. Network OS
   B. Guest OS
   C. Host OS
   D. Interruptible OS
   E. Uninterruptible OS

   Answer & Explanation

   D. Interruptible OS
   Explanation:
   Interruptible OS is an operating system with ability to handle multiple interrupts concurrently

5. **Which is a computer software, firmware, or hardware, that creates and runs virtual machine?**
   A. Hypervisor
   B. Uninterruptible OS
   C. Parser
   D. Network OS
   E. None of these

   Answer & Explanation

   A. Hypervisor
   Explanation:
   Hypervisor is a computer software, firmware, or hardware, that creates and runs virtual machine.

6. **Which of the following is the smallest operating systems run on credit card sized devices containing a CPU chip?**
   A. Network OS
   B. Guest OS
   C. Host OS
   D. Embedded OS
   E. Smart Card OS

   Answer & Explanation

   E. Smart Card OS
   Explanation:
   Smart Card OS is the smallest operating systems run on credit card sized devices containing a CPU chip

7. **Which of the following is the abstraction of upper layer protocols from physical connections?**
   A. Para-Virtualization
   B. Memory Virtualization
   C. I/O Virtualization
   D. All of these
   E. None of these

   Answer & Explanation

   C. I/O Virtualization
   Explanation:
   I/O Virtualization is the abstraction of upper layer protocols from physical connections or physical transport

8. **It is an enhancement of virtualization technology in which a guest OS is recompiled prior to installation inside a virtual machine is known as?**
   A. Para-Virtualization
   B. Memory Virtualization
   C. I/O Virtualization
   D. All of these
   E. None of these

A. Para-Virtualization
Explanation:
Para-Virtualization is an enhancement of virtualization technology in which a guest OS is recompiled prior to installation inside a virtual machine

9. **Which is a protocol that one program can use to request a service from a program of another computer on a network?**
   A. Para-Virtualization
   B. Memory Virtualization
   C. I/O Virtualization
   D. Remote Procedure Call
   E. Load Balancing

D. Remote Procedure Call
Explanation:
Remote Procedure Call is a protocol that one program can use to request a service from a program of another computer on a network without having to understand the network's details

10. **Which of the following is the main reason for computer server clustering?**
    A. Para-Virtualization
    B. Memory Virtualization
    C. I/O Virtualization
    D. Remote Procedure Call
    E. Load Balancing

E. Load Balancing
Explanation:
Load Balancing is the main reason for computer server clustering

11. **Which of the following is a feature of the Windows operating system that causes predetermined system actions when certain media is inserted. ?**
    A. BIOS
    B. Flat file
    C. Auto Run
    D. All of these
    E. None of these

C. Auto Run
Explanation:
Auto Run is a feature of the Windows operating system that causes predetermined system actions when certain media is inserted

12. **Which of the following is a register in a computer processor that contains the address of the instruction being executed at the current time?**
    A. Device Driver
    B. Scheduler
    C. Dispatcher
    D. Program Counter
    E. None of these

D. Program Counter
Explanation:
The Program Counter is a register in a computer processor that contains the address of the instruction being executed at the current time.

13. **To load an operating system into the computer's main memory or Random Access Memory (RAM) is known as _____**
    A. Waiting time
    B. Response time
    C. Turnaround time
    D. Throughput
    E. Boot

E. Boot
Explanation:
To load an operating system into the computer's main memory or random access memory (RAM) is known as Boot.

14. **This is a situation in which two computer programs sharing the same resource are effectively preventing each other from accessing the resource is known as?**
    A. Scheduling
    B. Deadlock
    C. Parsing
    D. Running
    E. None of these

B. Deadlock
Explanation:
Deadlock is a situation in which two computer programs sharing the same resource are effectively preventing each other from accessing the resource.

15. **Which of the following is the central component of most computer operating systems.?**
    A. Scheduling
    B. Deadlock
    C. Parsing
    D. Running
    E. Kernel

E. Kernel
Explanation:
The central component of most computer operating systems is Kernel.

16. **Which of the following is the module that gives control of the CPU to the process selected by the short-time scheduler?**
    A. Interrupt
    B. Dispatcher
    C. Scheduler
    D. Running
    E. Kernel

B. Dispatcher
Explanation:
Dispatcher is the module that gives control of the CPU to the process selected by the short-time scheduler

17. **Which of the following is a data structure maintained by job scheduler software?**
    A. job queue
    B. ready queue
    C. process queue
    D. execution queue
    E. None of the

A. job queue
Explanation:
A job queue, is a data structure maintained by job scheduler software containing jobs to run

18. **Which is a set of all processes that are waiting to be scheduled on a core?**
    A. job queue
    B. ready queue
    C. process queue
    D. execution queue
    E. None of these

B. ready queue
Explanation:
Ready queue is a set of all processes that are waiting to be scheduled on a core

19. **This is used to create a new process, which becomes the child process of the caller is known as?**
    A. Thread Cancellation
    B. Mutual Exclusion
    C. Signal Handling
    D. System Call
    E. Both (B) and (C)

D. System Call
Explanation:
System Call, fork() is used to create a new process, which becomes the child process of the caller

20. **Which of the following is a program that prevents simultaneous access to a shared resource?**
    A. Thread Cancellation
    B. Mutual Exclusion
    C. Signal Handling
    D. System Call
    E. Both (B) and (C)

B. Mutual Exclusion
Explanation:
Mutual Exclusion is a program that prevents simultaneous access to a shared resource

21. **Which of the following is a dynamic scheduling algorithm used in real-time operating systems to place processes in a priority queue?**
    A. Earliest deadline first (EDF)
    B. First-Come First-Serve Scheduling(FCFS)
    C. Round Robin Scheduling(RRS)
    D. Multilevel Queue Scheduling(MQS)
    E. None of these

A. Earliest deadline first (EDF)
Explanation:
Earliest deadline first (EDF) or least time to go is a dynamic scheduling algorithm used in real-time operating systems to place processes in a priority queue.

22. **Which of the following is the module that gives control of the CPU to the process selected by the scheduler?**
    A. Device Driver
    B. Scheduler
    C. Dispatcher
    D. All of these
    E. None of these

C. Dispatcher
Explanation:
The dispatcher is the module that gives control of the CPU to the process selected by the scheduler.

23. **Number of processes completed per unit time is termed as _____**
    A. Waiting time
    B. Response time
    C. Turnaround time
    D. Throughput
    E. None of these

    Answer & Explanation

    D. Throughput
    Explanation:
    Number of processes that complete their execution per time unit.

24. **The time taken in an interactive program from the issuance of a command to the commence of a response to that command is known as?**
    A. Waiting time
    B. Response time
    C. Turnaround time
    D. Throughput
    E. None of these

    Answer & Explanation

    B. Response time
    Explanation:
    Response time is the interval between submission of a request.

25. **Which of the following is time required for a particular process to complete, from submission time to completion.?**
    A. Waiting time
    B. Response time
    C. Turnaround time
    D. Throughput
    E. None of these

    Answer & Explanation

    C. Turnaround time
    Explanation:
    Turnaround time is the time difference between completion time and arrival time.

26. **Which of the following is the time difference between turn around time and burst time?**
    A. Waiting time
    B. Response time
    C. Arrival Time
    D. Throughput
    E. None of these

    Answer & Explanation

A. **Waiting time**
Explanation:
An amount of time a process has been waiting in the ready queue.

27. **Which of the following is a time required by a process for CPU execution?**
    A. Waiting time
    B. Response time
    C. Arrival Time
    D. Throughput
    E. Burst time

    Answer & Explanation

    E. Burst time
    Explanation:
    Burst time is a time required to complete execution of particular task or process.

28. **Which of the following is similar to FCFS scheduling?**
    A. Earliest deadline first (EDF)
    B. Multilevel Feedback Queue Scheduling(MQS)
    C. Round Robin Scheduling(RRS)
    D. Multilevel Queue Scheduling(MQS)
    E. None of these

    Answer & Explanation

    C. Round Robin Scheduling(RRS)
    Explanation:
    Round robin scheduling is similar to FCFS scheduling, except that CPU bursts are assigned with limits called time quantum.

29. **Which of the following is an example of dynamic priority scheduling algorithms?**
    A. Earliest deadline first scheduling
    B. Least slack time scheduling
    C. Round Robin Scheduling(RRS)
    D. Both (A) and (B)
    E. Both (B) and (C)

    Answer & Explanation

    D. Both (A) and (B)
    Explanation:
    Earliest deadline first scheduling and Least slack time scheduling are examples of Dynamic priority scheduling algorithms.

30. **Which of the following is also known as CPU Scheduler?**
    A. Long Term Scheduler
    B. Short Term Scheduler
    C. Medium Term Scheduler

D. Both (A) and (B)
E. Both (B) and (C)

B. Short Term Scheduler
Explanation:
Short Term Scheduler is also known as CPU Scheduler used to enhance the CPU performance and it runs very frequently

31. **………. is an user interface that uses only keyboard for input.**
    (A) Graphical User Interface
    (B) Command Line Interface
    (C) Both (A) & (B)
    (D) None of the above

    Answer

    (B) Command Line Interface

32. **Which of the following is an example of Preemptive Multi-Tasking OS?**
    (A) MS-DOS
    (B) Linux
    (C) OS/2
    (D) Mac OS

    Answer

    (C) OS/2

33. **An Operating System that can predict the exact time duration for operations is called**
    (A) Hard RTOS
    (B) Soft RTOS
    (C) Both (A) & (B)
    (D) None of the above

    Answer

    (A) Hard RTOS

34. **The use of software to allow system hardware to run multiple applications on different OS is termed as**
    (A) OS Virtualization
    (B) OS level Virtualization
    (C) Both (A) & (B)
    (D) None of the above

    Answer

    (A) OS Virtualization

35. **The command interpreter in Linux is known as …..**
    (A) Fork

(B) Kernel
(C) Shell
(D) None of the above

Answer

(C) Shell

36. **Which is a hardware register that contains status information of the Processor?**
    (A) Stack pointer
    (B) Program Counter
    (C) Accumulator
    (D) Status register

    Answer

    (D) Status register

37. **Physical memory can be divided into a number of equal sized blocks called…..**
    (A) Page
    (B) Frame
    (C) Block
    (D) None of the above

    Answer

    (B) Frame

38. **The most commonly used Linux shell is…….**
    (A) C Shell
    (B) Korn Shell
    (C) Bourne Shell
    (D) Bash Shell

    Answer

    (D) Bash Shell

39. **A table that contains the base address of each page in physical memory is called…..**
    (A) Page table
    (B) Frame table
    (C) Memory table
    (D) None of the above

    Answer

    (A) Page table

40. **Virtual memory can be implemented with ……**
    (A) Thrashing
    (B) Synchronization
    (C) Demand Paging
    (D) None of the above

Answer

(C) Demand Paging

41. **Producer – Consumer problem, one of the classical problems of synchronization is also called……**
    (A) Bounded Buffer Problem
    (B) Readers Writers Problem
    (C) Dining Philosophers Problem
    (D) None of the above

    Answer

    (A) Bounded Buffer Problem

42. **Which of the following command is used to print current working directory in Unix?**
    (A) mkdir
    (B) pwd
    (C) rm
    (D) None of the above

    Answer

    (B) pwd

43. **……. is a classic synchronization problem that involves the allocation of limited resources amongst a group of processes in a deadlock free and starvation free manner.**
    (A) Bounded Buffer Problem
    (B) Dining Philosophers Problem
    (C) Readers Writers Problem
    (D) None of the above

    Answer

    (B) Dining Philosophers Problem

44. **……. is a system call that returns the process ID of the parent of the current process.**
    (A) getpid
    (B) wait
    (C) getppid
    (D) None of the above

    Answer

    (C) getppid

45. **Which of the following is standard print command in Unix?**
    (A) ncftp
    (B) grep
    (C) ls
    (D) lpr

Answer

(D) lpr

46. **In Unix, "file" command is used to determine ……**
    (A) file name
    (B) file type
    (C) file content
    (D) None of the above

    Answer

    (B) file type

47. **What is the full form of RTSP?**
    (A) Real Time System Protocol
    (B) Real Transfer System Protocol
    (C) Real Time Streaming Protocol
    (D) Real Trigger Streaming Protocol

    Answer

    (C) Real Time Streaming Protocol

48. **Which of the following is a System call that can be used to send signal to a process?**
    (A) kill
    (B) wait
    (C) exec
    (D) None of the above

    Answer

    (A) kill

49. **…….. allows a thread to terminate the execution of other threads in the process.**
    (A) Thread Scheduling
    (B) Thread Safety
    (C) Thread Cancellation
    (D) None of the above

    Answer

    (C) Thread Cancellation

50. **Which of the following scheduling algorithm is impossible to implement?**
    (A) FCFS Scheduling
    (B) Priority Scheduling
    (C) Shortest Job First (SJF) Scheduling
    (D) None of the above

    Answer

    (C) Shortest Job First (SJF) Scheduling