



**PUNE VIDYARTHI GRIHA'S
COLLEGE OF SCIENCE AND TECHNOLOGY
Affiliated to University of Mumbai**

Question Bank

**Class: F.Y.B. Sc.IT
Subject: Operating System**

Semester: I

Unit -1

Q.1 A _____ is a program that acts as an interface between the software and the computer hardware.

- a. Cooperating
- b. Operating system
- c. Programming
- d. Computer

Q. 2 _____ systems guarantee that critical tasks complete on time.

- a. Soft real-time
- b. Bond real-time
- c. Hard real-time
- d. Exact real-time

Q. 3 A thread is also called

- a. Light Weight Process(LWP)
- b. Heavy Weight Process(HWP)
- c. Process
- d. Program

Q.4 A thread shares with other thread belonging to the same process its

- a. thread ID
- b. Program Counter
- c. register set and stack
- d. code section and data section

Q.5 _____ is a smallest unit of a process

- a. thread
- b. kernel
- c. system call
- d. heap

Q.6 A heavy weight process

- a. has multiple threads of execution
- b. has a single thread of execution
- c. can have multiple or a single thread for execution
- d. has a partial thread execution

Q.7 A process having multiple threads of control implies _____

- a. it can do more than one task at a time
- b. it can do only one task at a time, but much faster
- c. it has to use only one thread per process
- d. it can do some fixed number of task

Q.8 What is FIFO algorithm?

- a. first executes the job that came in last in the queue
- b. first executes the job that came in first in the queue
- c. first executes the job that needs minimal processor
- d. first executes the job that has maximum processor needs

Q.9 The kernel is _____ of user threads

- a. a part of

- b. the creator of
- c. unaware of
- d. aware of

Q.10 Which of the following multithreading model maps many user level threads to one kernel thread?

- a. Many to One Model
- b. One to Many Model
- c. Many to Many Model
- d. One to One Model

Q.11 A _____ is a program in execution.

- a. Process
- b. Thread
- c. Application
- d. Software

Q.12 User Threads

- a. are supported above the kernel and are managed without the kernel support
- b. are supported below the kernel and are managed without the kernel support
- c. are supported above the kernel and are managed with the kernel support
- d. are supported below the kernel and are managed with the kernel support

Q.13 Kernel Threads

- a. cannot be supported and managed directly by the operating system
- b. can be supported and managed directly by the operating system
- c. are supported below the kernel and are managed without kernel support

d. None of the above

Q.14 When a thread needs to wait for an event it will

- a. Block
- b. Execute
- c. Terminate
- d. Update

Q.15 In a pure Kernel Level Thread facility all of work of thread management is done by the

- a. Application
- b. Program
- c. Kernel
- d. Threads

Q.16 In many to one multithreading model many user level threads are attached to

- a. one register
- b. operating system
- c. one kernel thread
- d. other threads

Q.17 The kernel dispatcher keeps track of all ready

- a. Systems
- b. Registers
- c. Threads
- d. Buffers

Q.18 Event for which a thread block occurs the thread is moved to the ready

- a. Buffer
- b. Memory
- c. Registers
- d. Queue

Q.19 _____ time is the amount of time taken to execute a particular process

- a. Throughput
- b. Seek
- c. Turnaround
- d. Goal

Q.20 Which module gives control of the CPU to the process selected by the short-term scheduler?

- a. Dispatcher
- b. Interrupt
- c. Scheduler
- d. System Call

Q.21 What is Inter process communication?

- a. allows processes to communicate and synchronize their actions when using the same address Space
- b. allows processes to communicate and synchronize their actions without using the same address Space
- c. allows the processes to only synchronize their actions without communication
- d. allows to be asynchronous

Q.22 Message passing system allows processes to _____

- a. communicate with one another without resorting to shared data

- b. communicate with one another by resorting to shared data
- c. share data
- d. name the recipient or sender of the message

Q.23 Which of the following two operations are provided by the IPC facility?

- a. write & delete message
- b. delete & receive message
- c. send & delete message
- d. receive & send message

Q.24 What is SJF algorithm?

- a. first executes the job that came in last in the queue
- b. first executes the job that came in first in the queue
- c. first executes the job that needs minimal processor
- d. first executes the job that has maximum processor needs

Q.25 The strategy of making processes that are logically runnable to be temporarily suspended is called _____

- a. Non pre-emptive scheduling
- b. Pre-emptive scheduling
- c. Shortest job first
- d. First come First served

Q.26 The RR algorithm is _____

- a. pre-emptive
- b. non-pre-emptive
- c. Does not allow time slice

d. Starvation takes place

Q.27 The time required to create a new thread in an existing process is:

- a. greater than the time required to create a new process
- b. less than the time required to create a new process
- c. equal to the time required to create a new process
- d. none of the mentioned

Q.28 Termination of the process terminates _____

- a. first thread of the process
- b. first two threads of the process
- c. all threads within the process
- d. no thread within the process

Q.29 Which one of the following is not a valid state of a thread?

- a. running
- b. parsing
- c. ready
- d. blocked

Q.30 Operating is also known as _____

- a. Resource manager
- b. Kernel
- c. System call
- d. Thread

Q.31 The register context and stacks of a thread are deallocated when the thread?

- a. terminates
- b. blocks
- c. unblocks
- d. spawns

Q.32 In how many ways Threads are implemented?

- a. Two
- b. Three
- c. Four
- d. Five

Q.33 Multithreading models are _____ types?

- a. 2
- b. 3
- c. 4
- d. 5

Q.34 What is not true about thread?

- a. Thread switching does not need to interact with operating system.
- b. All threads can share same set of open files, child processes
- c. Multiple threaded processes use fewer resources.
- d. Thread is the largest unit of an operating system

Q.35 Which of the following is not an operating system?

- a. Windows
- b. Linux

- c. Oracle
- d. DOS

Q.36 User can interact directly with the operating system through a user interface such as a command language or _____

- a. Models
- b. GUI
- c. Internal memory
- d. External Memory

Q.37 BIOS are used?

- a. By operating system
- b. By compiler
- c. by interpreter
- d. by application software

Q.38 A circuitry that processes that responds to and processes the basic instructions that are require to drive a computer system is _____

- a. Memory
- b. ALU
- c. CU
- d. Processor

Q.39 A permanent memory, which halls data and instruction for start-up the computer and does not erase data after power off.

- a. Network interface card
- b. CPU
- c. ROM
- d. RAM

Q.40 Which of the following memories must be refreshed many times per second?

- a. EPROM

- b. ROM
- c. Static RAM
- d. Dynamic RAM

Q.41 Which of the following places the common data elements in order from smallest to largest?

- a. Character, File, Record, Field, Database, File
- b. Character, Record, Field, Database, File
- c. Character, Field, Record, File, Database
- d. Bit, Byte, Character, Record, Field, File, Database

Q.42 The fastest data access is provided using _____

- a. Cache
- b. DRAM's
- c. SRAM's
- d. Registers

Q.43 memory of computer which is used to speed up the processing

- a. ROM
- b. Cache memory
- c. BOIS
- d. RAM

Q44. _____ system call use to create a new process

- a. link()
- b. kill()
- c. fork()

d. create()

Q.45 The _____ is the core of operating system.

- a. System call
- b. Memory
- c. Kernel
- d. Model

Q.46 Which of the following multithreading model maps one user level threads to one kernel thread?

- a. Many to One Model
- b. One to Many Model
- c. Many to Many Model
- d. One to One Model

Q.47 User Threads

- a. are supported above the kernel and are managed without the kernel support
- b. are supported below the kernel and are managed without the kernel support
- c. are supported above the kernel and are managed with the kernel support
- d. are supported below the kernel and are managed with the kernel support

Q.48 Kernel Threads

- a. cannot be supported and managed directly by the operating system
- b. can be supported and managed directly by the operating system
- c. are supported below the kernel and are managed without kernel support
- d. are supported and managed by the user thread

Q.49 In many to one multithreading model many user level threads are attached to

- a. one register
- b. operating system
- c. one kernel thread
- d. other threads

Q.50 Event for which a thread block occurs the thread is moved to the ready

- a. Buffer
- b. Memory
- c. Registers
- d. Queue

Unit -2

Q.1 ----- is a pointer to the address of the next instruction to be executed for this process.

- a. Program Counter
- b. Stack
- c. Process
- d. Application

Q. 2 The process-----is the set of logical addresses that a process references in its code.

- a. Zone
- b. Area
- c. Mapping
- d. Address Space

Q. 3 Main Memory refers to a _____ memory that is the internal memory to the computer

- a. virtual
- b. physical
- c. short
- d. flash

Q. 4 _____ is the process of bringing in each process in main memory

- a. Paging
- b. Booting
- c. Swapping
- d. Popping

Q.5 -----occurs in a dynamic memory allocation system when most of the free blocks are too small to satisfy any request.

- a. Fragmentation
- b. Detection
- c. Looping
- d. Swapping

Q.6 The difference between allocated and required memory is known as _____

- a. External fragmentation
- b. Internal fragmentation
- c. Overall Fragmentation
- d. General Fragmentation

Q.7 A _____ is the data structure used by a virtual memory system

- a. Page Table

- b. Track
- c. Sector
- d. Partition

Q. 8 A Page Table is to store the mapping between _____ address and physical addresses.

- a. main
- b. external
- c. internal
- d. virtual

Q.9 Segmentation allows breaking of the virtual address space of a single process into _____

- a. pages
- b. segments
- c. partition
- d. block

Q.10 _____ is a unique tag, usually a number identifies the file within the file system.

- a. File identifier
- b. File name
- c. File type
- d. File space

Q.11 File type can be represented by _____

- a. file name
- b. file extension
- c. file identifier

d. file space

Q.12 What is the mounting of file system?

a. crating of a file system

b. deleting a file system

c. attaching portion of the file system into a directory structure

d. removing the portion of the file system into a directory structure

Q.13 Mapping of file is managed by _____

a. file metadata

b. virtual memory

c. page table

d. file system

Q.14 Mapping of network file system protocol to local file system is done by _____

a. network file system

b. local file system

c. volume manager

d. remote mirror

Q.15 Which one of the following explains the sequential file access method?

a. random access according to the given byte number

b. read bytes one at a time, in order

c. read/write sequentially by record

d. read/write randomly by record

Q.16 To create a new file application program calls _____

- a. basic file system
- b. logical file system
- c. file-organisation module
- d. file system

Q.17 The data structure used for file directory is called _____

- a. mount table
- b. hash table
- c. file table
- d. process table

Q. 18 In which type of allocation method each file occupy a set of contiguous block on the disk?

- a. contiguous allocation
- b. dynamic-storage allocation
- c. linked allocation
- d. indexed allocation

Q.19 The information about all files is kept in _____

- a. swap space
- b. operating system
- c. separate directory structure
- d. app

Q.20 A file is a/an _____ data type.

- a. abstract
- b. primitive
- c. public
- d. private

Q.21 Which of the following are the two parts of the file name?

- a. name & identifier
- b. identifier & type
- c. extension & name
- d. type & extension

Q.22 For a direct access file _____

- a. there are restrictions on the order of reading and writing
- b. there are no restrictions on the order of reading and writing
- c. access is restricted permission wise
- d. access is not restricted permission wise

Q.23 The index contains _____

- a. names of all contents of file
- b. pointers to each page
- c. pointers to the various blocks
- d. pointer to segment

Q.24 Which of the following are the types of Path names?

- a. absolute & relative
- b. local & global
- c. global & relative

- d. relative & local

Q.25 An absolute path name begins at the _____

- a. leaf
- b. stem
- c. current directory
- d. root

Q.26 A relative path name begins at the _____

- a. leaf
- b. stem
- c. current directory
- d. root

Q.27 A file can be defined as a data structure which stores the sequence of _____.

- a. Data
- b. Information
- c. Collection
- d. Records

Q.28 Device ----- are software modules that can be plugged into an OS to handle a particular device.

- a. Apps
- b. Drivers
- c. Conductors
- d. Pressers

Q.29 Main Memory refers to a _____ memory that is the internal memory to the computer

- a. virtual

- b. physical
- c. short
- d. flash

Q.30 _____ is the process of bringing in each process in main memory

- a. Paging
- b. Booting
- c. Swapping
- d. Poping

Q.31 ----- occurs in a dynamic memory allocation system when most of the free blocks are too small to satisfy and request.

- a. Fragmentation
- b. Detection
- c. Looping
- d. Swapping

Q.32 Physical memory is divided into blocks of equal size called _____

- a. Sheets
- b. Memory
- c. Docs
- d. Pages

Q.33 CD-ROM refers to _____

- a. Floppy disk
- b. Compact Disk-Read Only Memory
- c. Compressed Disk-Read Only Memory
- d. Compressed Disk- Random Access Memory

Q.34 If a higher priority process arrives and wants service, the memory manager can swap out the lower priority process to execute the higher priority process. When the higher priority process finishes, the lower priority process is swapped back in and continues execution. This variant of swapping is sometimes called?

- a. priority swapping
- b. pull out, push in
- c. roll out, roll in
- d. roll out, pull out

Q.35 To create a file _____

- a. allocate the space in file system
- b. make an entry for new file in directory
- c. allocate the space in file system & make an entry for new file in directory
- d. define its path

Q.36 Which file is a sequence of bytes organized into blocks understandable by the system's linker?

- a. object file
- b. source file
- c. executable file
- d. text file

Q.37 Mapping of file is managed by _____

- a. file metadata
- b. page table
- c. virtual memory
- d. file system

Q.38 Which one of the following explains the sequential file access method?

- a. random access according to the given byte number
- b. read bytes one at a time, in order
- c. read/write sequentially by record
- d. read/write randomly by record

Q.39 RAID stands for _____

- a. Redundant Allocation of Inexpensive Disks
- b. Redundant Array of Important Disks
- c. Redundant Allocation of Independent Disks
- d. Redundant Array of Independent Disks

Q.40 The solution to the problem of reliability is the introduction of _____

- a. aging
- b. scheduling
- c. redundancy
- d. disks

Q.41 RAID level ----- refers to disk arrays with striping at the level of blocks, but without any redundancy.

- a. 0
- b. 1
- c. 2
- d. 3

Q.42 The information about all files is kept in :

- a. swap space

- b. operating system
- c. separate directory structure
- d. Kernel

Q.43 The _____ is not an operation of a directory in linux.

- a. md
- b. mkdir
- c. rmdir
- d. open

Q.44 The operating system keeps a small table containing information about all open files called:

- a. system table
- b. open-file table
- c. file table
- d. directory table

Q.45 The directory can be viewed as a _____ that translates file names into their directory entries.

- a. symbol table
- b. partition
- c. swap space
- d. cache

Q.46 What will happen in the single level directory?

- a. All files are contained in different directories all at the same level
- b. All files are contained in the same directory
- c. Depends on the operating system

- d. All files are at different location

Q.47 The current directory contains, most of the files that are _____

- a. of current interest to the user
- b. stored currently in the system
- c. not used in the system
- d. not of current interest to the system

Q.48 Which of the following is not a part of all the versions of UNIX?

- a. Kernel and Shell
- b. Commands and utilities
- c. Graphical user interface
- d. System Calls

Q.49 For larger page tables, they are kept in main memory and a _____ points to the page table.

- a. page table base register
- b. page table base pointer
- c. page table register pointer
- d. page table base

Q.50 Every address generated by the CPU is divided into two parts. They are _____

- a. frame bit & page number
- b. page number & page offset
- c. page offset & frame bit
- d. frame offset & page offset

Unit -3

1. ___ are used widely in computer architecture and vary in their signaling methods, speed, throughput, and connection methods
 - a. bus
 - b. card
 - c. interface
 - d. connector

2. connects physical device to system bus like minicomputers, pcs,etc
 - a. wired
 - b. driver
 - c. device controller
 - d. device connection

3. a ___ module controls exchange of data between i/o module and main memory
 - a. dma
 - b. rma
 - c. dda
 - d. ram

4. in polling _____ cycle is used wait for i/o from device
 - a. wait-busy
 - b. busy-wait
 - c. stop-wait
 - d. wait-stop

5. the processor issues an i/o command and continues to execute in which of the following
 - a. programmed i/o polling
 - b. interrupt-driven i/o
 - c. character-driven i/o
 - d. direct memory access

6. ___ allocates kernel buffer and sends command to controller
 - a. thread
 - b. polling
 - c. device controller
 - d. process

7. a _____ is one that stores information in fixed-size blocks, each one with its own address
 - a. block device
 - b. character device
 - c. input device

- d. output device
8. a ____ delivers or accepts a stream of characters, without regard to any block structure
- a. block device
 - b. character device
 - c. input device
 - d. output device
9. what perform job of convert the serial bit stream into a block of bytes and perform any error correction necessary.
- a. hardware
 - b. driver
 - c. processor
 - d. controller
10. the electronic component is called
- a. adapter
 - b. connector
 - c. hardware
 - d. circuit
11. the cpu can write the contents of ____ to a control register
- a. reg
 - b. memory
 - c. cache
 - d. temp
12. in which system each control register is assigned a unique memory address to which no memory is assigned
- a. memory-mapped i/o
 - b. interrupt-driven i/o
 - c. direct memory access
 - d. control-driven i/o
13. in addition to the control registers, many devices have a ____ that the operating system can read and write
- a. frame buffer
 - b. cache memory
 - c. data buffer
 - d. virtual buffer
14. to prevent loop forever with memory-mapped i/o, the hardware has to be equipped with the ability of ____
- a. selectively disable caching

- b. selectively disable register
- c. selectively disable thread
- d. selectively disable process

15. the dma controller initiates the transfer by issuing a read request* over the bus to the _____

- a. device controller
- b. disk controller
- c. memory controller
- d. register controller

16. buses can operate in two modes ___ and ___

- a. word-at-a-time mode,block mode
- b. character-at-a-time,character mode
- c. block mode,chracter mode
- d. word-at-a-time mode,character-at-a-time

17. a key concept in the design of i/o software is known as _____

- a. device dependent
- b. device independent
- c. controller independent
- d. controller dependent

18. an interrupt that does not meet these requirements is called an

- a. imprecise interrupt
- b. inprecise interrupt
- c. unprecise interrupt
- d. omni-precise interrupt

19. the method of i/o is to have the cpu do all the work is refer as _____

- a. interrupt-driven i/o
- b. programmed i/0
- c. controlled i/o
- d. dma i/o

20. the operating system usually copies the buffer with the strmg to an array, say, p, in _____

- a. kernel space
- b. user space
- c. hal space
- d. memory space

21. the posix standard uses the less-picturesque term canonical mode to describe _____

- a. word-oriented mode
- b. line-oriented mode

- c. character-oriented mode
 - d. paragraph-oriented mode
22. the number in the i/o port is the key number, called the ____
- a. scan code
 - b. read code
 - c. register code
 - d. interrupt code
23. a desktop pc often has a __ power supply
- a. 200-watt
 - b. 20-watt
 - c. 2000-watt
 - d. 2-watt
24. ____ can be used to run handheld devices, but do not have enough energy to power notebook computers with large bright screens
- a. removable battery
 - b. disposal battery
 - c. rechargeable battery
 - d. attached battery
25. which type of battery can store enough energy to power a notebook for a few hours.
- a. removable battery
 - b. disposal battery
 - c. rechargeable battery
 - d. attached battery
26. __ can occur in a variety of different situations besides requesting dedicated i/o devices
- a. reservation
 - b. deadlock
 - c. lagging
 - d. hault
27. deadlocks can occur when processes have been granted exclusive access to.
- a. resources
 - b. data
 - c. memory
 - d. component
28. ____ resource is one that can be taken away from the process owning it with no ill effects
- a. preemptable
 - b. non preemptable
 - c. preserve

d. reserve

29. potential deadlocks that involve preemptable resources can usually be resolved by ____

- a. allocating resources
- b. deallocating resources
- c. reallocating resources
- d. locking resources

30. there must be a circular chain of two or more processes, each of which is waiting for a resource held by the next member of the chain, select suitable method

- a. mutual exclusion condition
- b. hold and wait condition
- c. no preemption condition
- d. circular wait condition

31. each resource is either currently assigned to exactly one process or is available, select appropriate condition

- a. mutual exclusion condition
- b. hold and wait condition
- c. no preemption condition
- d. circular wait condition

32. processes currently holding resources that were granted earlier can request new resources

- a. mutual exclusion condition
- b. hold and wait condition
- c. no preemption condition
- d. circular wait condition

33. a directed arc from a process to a resource means that the process is ____

- a. currently blocked waiting for that resource
- b. currently blocked allocating for that resource
- c. currently blocked locking for that resource
- d. currently blocked relocating for that resource

34. the number of processes and the number and kind of resources possessed and requested are unimportant, this result holds for any kind of resource, including both hardware and software. this kind of deadlock is called ____

- a. memory deadlock
- b. hardware deadlock
- c. resource deadlock
- d. exclusive deadlock

35. if no cycles exist, the system is ____
- deadlocked
 - not deadlocked
 - waiting
 - locked
36. if cycles exist, the system is ____
- deadlocked
 - not deadlocked
 - waiting
 - locked
37. a scheduling algorithm that can avoid deadlocks is due to dijkstra it is known as
- the banker's algorithm
 - the ostrich algorithm
 - the round robin algorithm
 - the shortest algorithm
38. which strategy is often used when the mutual exclusion will be used for a very short time and the overhead of suspension is large compared to doing the work
- livelock
 - pastlock
 - exclusive lock
 - preemable lock
39. starvation can be avoided by using a
- first-come, first-served, resource allocation policy
 - last-come, first-served, resource allocation policy
 - first-come, last-served, resource allocation policy
 - last-come, last-served, resource allocation policy
40. recovery through rollback can be achieved by
- checkpoint a process periodically
 - take a resource from some other process
 - preferably, choose a process that can be rerun from the beginning
 - depends on nature of the resource and the process
41. process waiting for resources can be holding other resources
- starvation
 - spolling
 - deadlock
 - allocation

42. 'a' processes share 'b' resources of the same type. the maximum need of each process doesn't exceed 'b' and the sum all the their maximum needs is always less than a + b. in this set up

- a. deadlock can never occur
- b. deadlock may occur
- c. deadlock has to occur
- d. deadlock occurred

43. periodically invoking to test for deadlock is one of the ways for deadlock

.....

- a. prevention
- b. avoidance
- c. detection
- d. deletion

44. in resource allocation denial, a is one in which there is at least one sequence that does not result in a deadlock.

- a. safe state
- b. unsafe state
- c. safe allocation
- d. unsafe allocation

45. a semaphore consists of _____ element.

- a. the process id of the last process to operate on the semaphore
- b. the past value of the process id
- c. the current value of the resources
- d. the future value of the semaphore

46. in ____ state the system can allocate resources to each process (up to its maximum) in some order and still avoid a deadlock

- a. safe
- b. unsafe
- c. lock
- d. livelock

47. if all resources have only a single instance, then we can define a deadlockdetection algorithm that uses a variant of the resource-allocation graph, called

- a. wait-for graph
- b. circular graph
- c. tree graph
- d. traversal graph

48. to eliminate deadlocks by aborting a process, which method can be used methods

- a. abort all deadlocked processes

- b. reallocate all deadlocked processes
 - c. lock all deadlocked processes
 - d. execute all deadlocked processes
49. preemption deal with deadlocks, which issue need to be addressed
- a. waiting
 - b. killing
 - c. rollback
 - d. execute
50. the ___ algorithm requires a priori information about the maximum number of each resource class that each process may request
- a. banker's
 - b. ostrich
 - c. lilo
 - d. fifo

Unit -4

1. ___ is the ability to run multiple operating systems on a single physical system and share the underlying hardware resources.
- a. virtualization
 - b. multiple processing
 - c. multiple programming
 - d. distributed system
2. virtualization manager, program that allows multiple operating systems to share a single hardware host also refer as
- a. hypermachine
 - b. hypervisor
 - c. hyperenvironment
 - d. hyperos
3. what perform job to support multiple copies of the actual hardware, called virtual machine
- a. type-1 hypervisor
 - b. type-2 hypervisor
 - c. type-3 hypervisor
 - d. type-3 hypervisor
4. ___ is just a user program running on, say, windows or linux that "interprets" the machine's instruction set, which also creates a virtual machine

- a. type-1 hypervisor
- b. type-2 hypervisor
- c. type-3 hypervisor
- d. type-3 hypervisor

5. in the case of a type 2 hypervisor, the operating system running on the hardware is called _____

- a. guest operating system
- b. base operating system
- c. host operating system
- d. native operating system

6. in type-1 hypervisor the operating system get install on its

- a. hard disk
- b. virtual disk
- c. virtual ram
- d. ram

7. sensitive instructions are caught this way and emulated, this technique is known as _____

- a. binary translation
- b. digital translation
- c. analog translation
- d. numeric translation

8. both type 1 and type 2 hypervisor modify the source code of the guest operating system so that instead of executing sensitive instructions at all, it makes_____

- a. hypervisor interface
- b. hypervisor interrupt
- c. hypervisor call
- d. hypervisor request

9. the kernel is modified to call special procedures whenever it needs to do something sensitive, together these procedures, called the _____

- a. virtual machine interface
- b. virtual machine manager
- c. virtual machine call
- d. virtual disk manager

10. modern operating systems nearly all support virtual memory, which is basically refer as

- a. mapping of memory
- b. mapping of pages
- c. mapping of disk
- d. mapping of cache

11. ____ is set in motion by having the operating system set a control register in the cpu that points to the top-level page table
- pagging
 - caching
 - mapping
 - virtualizing
12. ____ is software assisted virtualization technique that uses specialized apis to link virtual machines with the hypervisor to optimize their performance
- virtualization
 - paravirtualization
 - swapvirtualization
 - distributing system
13. the customers get a complete package that actually works, completely independent of which operating system they are running and which other software, packages, and libraries they have installed. these "shrink-wrapped" virtual machines are often called
- virtual disk
 - virtual machine
 - virtual appliances
 - virtual device
14. which technique involves sharing a single i/o resource among multiple virtual machines?
- i/o virtualization
 - memory virtualization
 - para virtualization
 - base virtualization
15. what refer as minimal base for building arbitrary systems including virtual machines
- macrokernel
 - microkernel
 - hypervisor
 - virtual manager
16. the microkernel type 1 hypervisor, hosts its drivers on the ____
- base partition
 - virtual partition
 - parent partition
 - child partition
17. all modern x86 cpus include a ____ and a ____ to optimize virtual memory performance
- mum,tbl
 - mmu,tlb

- c. mem,tlb
- d. mmu,tbl

18. _____ handles virtual-to-physical translations as defined by the os
- a. memory management unit
 - b. translation lookaside buffer
 - c. page management
 - d. paging
19. multicore virtualization method to allow hardware designers to get an abstraction of the _____ details of the processor cores
- a. high-level
 - b. low-level
 - c. neutral
 - d. no access
20. _____ use a physical hierarchy of two or more cache levels that statically determine the cache allocation and mapping
- a. chip multiprocessor
 - b. chip singleprocessor
 - c. chip physical memory
 - d. chip logical memory
21. a _____ is a virtual runtime environment that runs atop a single os kernel without emulating the underlying hardware
- a. virtual machine
 - b. virtual box
 - c. container
 - d. virtual disk
22. _____ manages the operation, execution and processes of virtual machines, virtual servers and virtual infrastructure, as well as the back-end hardware and software resources.
- a. virtual operating system
 - b. physical virtual machine
 - c. hardware system
 - d. software system
23. from cloud the user can quickly boot into the main os, because cloud continues booting the main os in _____
- a. foreground
 - b. background
 - c. virtual memory
 - d. mbr

24. ____ is defined as a simplified operating system that runs a web browser giving the users access to a variety of applications allowing the users to complete simpler and light-end tasks without the need of developing a full-fledged operating system

- a. cloud interface
- b. cloud application
- c. cloud os
- d. cloud api

25. what refer as storing and accessing data like your images, videos, documents, etc and programs, over the internet, instead of your computer hard drive or mobiles internal storage

- a. cloud memory
- b. cloud os
- c. cloud computing
- d. cloud storage

26. a computer system in which two or more cpus share full access to a common ram

- a. multiprocessor
- b. multicomputer
- c. multisystem
- d. distributed system

27. tightly-coupled cpus that do not share memory

- a. multiprocessor
- b. multicomputer
- c. multisystem
- d. distributed system

28. in which type of multiprocessor all the cpus shares the common memory

- a. local memory
- b. shared memory
- c. distributed memory
- d. virtual memory

29. every cpu has its own private memory refer as which multiprocessor

- a. local memory
- b. shared memory ans
- c. distributed memory
- d. virtual memory

30. multiprocessor, such as single instruction, multiple data stream (simd), which is usually used for ____

- a. scalar processing
- b. vector processing

- c. array processing
- d. page processing

31. inside a single system for executing multiple, individual series of instructions in multiple perspectives called as

- a. multiple instruction, multiple data stream (mimd)
- b. multiple instruction, single data stream (misd)
- c. single instruction, multiple data stream(simd)
- d. single instruction, single data stream (sisd)

32. in multicomputer each processor has its own memory and it is accessible by that particular processor and those processors can communicate with each other via an ____

- a. interlink machines
- b. interconnection network
- c. interconnection computer
- d. interconnection processor

33. ____ capable of messages passing between the processors.

- a. multiprocessor
- b. distributed system
- c. multicomputer
- d. standalone computer

34. multiprocessor supports ____ computing

- a. serial
- b. distributed
- c. sequential
- d. parallel

35. distributed computing supports by ____

- a. multiprocessor
- b. multicomputer
- c. distributer system
- d. standalone system

36. the ____ is the simplest and least expensive way of connecting several processors to a set of

memory modules

- a. shared link
- b. shared bus
- c. shared network
- d. shared memory

37. distributed os works on the which principle.

- a. file foundation
 - b. single system image
 - c. multi system image
 - d. networking image
38. the processor in distributed system describe which charecteristics ?
- a. vary in size and function
 - b. same in size and function
 - c. manufactured with single purpose
 - d. real-time devices
39. the technique virtualization that creates one single address space , is refer as
- a. loosely coupled
 - b. peer-to-peer
 - c. space-based
 - d. tightly coupled
40. the ability of multiple process to co-ordinate their activities by exchange of information
- a. synchronization
 - b. mutual exclusion
 - c. dead lock
 - d. starvation
41. which facility allows programmers to address memory from a logical point of view, without regard to the main memory, physically available.
- a. visual memory
 - b. real memory
 - c. virtual memory
 - d. secondary memory
42. the approach for multiprocessor thread scheduling and processor assignment, processes are not assigned to a particular processor.
- a. load sharing
 - b. gang scheduling
 - c. dynamic scheduling
 - d. load scheduling
43. which of the following is multiple-cpu system.
- a. mini computer
 - b. super computer
 - c. clustered system
 - d. distributed system

44. multiprocessors have the additional property that every memory word can be read as fast as every other memory word. these machines considered as
- uniform memory access
 - distributed memory access
 - shared memory access
 - physical memory access
45. when a system call is made, the cpu on which the system call was made traps to the kernel and processes the system call this statement is correct for which model
- asymmetric multiprocessor
 - symmetric multiprocessor
 - unique multiprocessor
 - uniform multiprocessor
46. distributed systems are built on concept of ____
- operating system
 - system architecture
 - computer network
 - virtualization
47. which model issues the choice between the upload/download model and the remote access mode?
- transfer model
 - share model
 - distribute model
 - connection model
48. the basic idea behind the web is to make a distributed system look like a giant collection of ____
- linked file
 - hyperlinked document
 - distributed document
 - log document
49. a system in which files can be moved without their names changing is said to have ____
- location independence
 - location dependence
 - mount independence
 - mount dependence
50. last paradigm for a distributed system is called _____
- coordination-based middleware
 - object-based middleware
 - sequential consistency

d. session semantics

Unit -5

1.As in a traditional Linux system, Android's first user-space process is _____, which is the root of all other processes.

- a. init
- b. start
- c. end
- d. load

2.Applications interact with the operating system through calls to libraries provided by it, which together compose the Android _____.

- a. Library
- b. Collection
- c. Framework
- d. Package

3.The _____ manager rides herd on power usage throughout the system.

- a. Power
- b. Electric
- c. Battery
- d. Cell

4._____ OS specifically designed for smartphones and tablet computers

- a. Android
- b. Raspberry pi
- c. Ubuntu
- d. fedora

5.Android is developed by the _____

- a. microsoft
- b. ibm
- c. open handset alliance
- d. google

6.Applications are implement in _____ language in android

- a. python
- b. perl
- c. c
- d. java

7.DVM stands for

- a. Java VM

- b. Dalvik VM
- c. Jam VM
- d. Hotspot

8. _____ files are generated after .class files compiled

- a. .exe
- b. .apk
- c. .dex
- d. .obj

9. In android there are total _____ major drivers

- a. 20
- b. 10
- c. 15
- d. 12

10. _____ is a new feature added by Android for managing how the system goes to sleep

- a. Wake locks
- b. Sleep locks
- c. Power Saver lock
- d. none of the above

11. In android _____ space is not available

- a. swap
- b. disk partition
- c. file partition
- d. none of the above

12. There are _____ layers in Binder IPC Architecture in android

- a. 2
- b. 4
- c. 6
- d. 3

13. Android Interface Definition Language is a _____ tool

- a. Interpreter
- b. GUI Interface
- c. Interface compiler
- d. Programming language

14. _____ is the part of Android that keeps track of all application packages.

- a. file manager
- b. package manager
- c. download manager
- d. api manager

15. When an android application is installed a new unique linux _____ is created for it
- index id
 - process id
 - user id
 - application id
16. In android a term used to isolate our app data and code execution from other apps is known as _____
- xgamebox
 - xbox
 - guibox
 - sandbox
17. UID zero represents _____ user in android
- root
 - group
 - guest
 - anonymous
18. In Linux OS the command line interface is called as _____
- cmd
 - shell
 - prompt
 - terminal
19. The heart of Linux implementation of threads is a new system call _____ which is not present in any other version of UNIX
- create()
 - fork()
 - clone()
 - exec()
20. _____ command searches a file for some pattern
- cat
 - grep
 - cp
 - cut
21. The Linux scheduler is _____
- preemptive
 - non-preemptive
 - both
 - none
22. Linux uses a _____ level paging scheme
- 2

- b. 4
- c. 5
- d. 3

23. GRUB stands for _____

- a. Grand Unified Bootloader
- b. Grand Unique Bitmap
- c. Grand Unified Bitmap
- d. Grand Uniterupt Bootloader

24. A _____ process is a process whose execution is completed but it still has an entry in the process table

- a. Suspended
- b. Terminated
- c. Zombie
- d. Wait State

25. Linux divides the devices into _____ categories

- a. 5
- b. 3
- c. 4
- d. 6

26. i-node number means _____

- a. index number
- b. instruction number
- c. interruption number
- d. all of the above

27. _____ is the command and system call which is used to change the access permissions of file system objects

- a. cmd
- b. cmod
- c. chmod
- d. ccmmod

28. The _____ command is a command-line utility for listing the contents of a directory

- a. ps
- b. dfs
- c. fs
- d. ls

29. Directories can be removed with _____ command

- a. remdir
- b. rmvdir
- c. rmdir

d. removedir

30.A ___ is a filesystem that maintains a special file called a journal that is used to repair any inconsistencies that occur as the result of an improper shutdown of a computer.

- a. journaling filesystem
- b. Network File System
- c. heirarical file system
- d. Normal file system

31.In linux security model is group into 2 categories, they are_____ and _____

- a. validation and verification
- b. authentication and access control
- c. authorization and validation
- d. verification and access control

32.In Linux the background processes is also known as _____

- a. Daemon
- b. Zombie
- c. multitasking
- d. multiprocessing

33.In android there are total _____ major drivers

- a. 20
- b. 10
- c. 15
- d. 12

34._____ is the part of Android that keeps track of all application packages.

- a. file manager
- b. package manager
- c. download manager
- d. api manager

35. When an android application is installed a new unique linux _____ is created for it

- a. index id
- b. process id
- c. user id
- d. application id

36. In android a term used to isolates our app data and code execution from other apps is know as _____

- a. xgamebox
- b. xbox
- c. guibox
- d. sandbox

37. UID 1001 represent _____ service
- wifi
 - telephony
 - bluetooth
 - network
38. The principal data structure in each volume is the _____, which is a linear sequence of fixed-size 1-KB records.
- Most File Table
 - Master Flat Tube
 - Main File Time
 - Master File Table
39. The _____ program first copies itself to a fixed high-memory address to free up low memory for the operating system.
- Load
 - Boot
 - Init
 - Start
40. In which language UNIX is written?
- JAVA
 - Python
 - C++
 - C
41. What is the windowing system of UNIX known as?
- X Window system
 - LINUX
 - Red Hat
 - DOS
42. Which part of the UNIX operating system interacts with the hardware?
- Kernel
 - Shell
 - vi editor
 - application program
43. What is the high speed memory between the main memory and the CPU called?
- Register Memory
 - Cache Memory
 - Storage Memory

d. Virtual Memory

44. In android _____ space is not available

- a. swap
- b. disk partition
- c. file partition
- d. partition

45. Which command is used to display the operating system name

- a. Os
- b. Unix
- c. Kernel
- d. Uname

46. Which of the following OS is not based on linux?

- a. Ubuntu
- b. Redhat
- c. CentOS
- d. BSD

47. Which of the following is not an OS for mobile?

- a. Palm
- b. Windows
- c. Mango
- d. Android

48. _____ is the protection of smart-phones, phablets, tablets, and other portable tech-devices, & the networks to which they connect to, from threats & bugs.

- a. OS Security
- b. Database security
- c. Cloud security
- d. Mobile security

49. In the shell, by default, all variables are considered and stored as

- a. String
- b. Integer
- c. Character
- d. float

50. To redefine a variable, it can be removed from the list of variables by using the command

- a. unset
- b. delete
- c. remove
- d. clear

