

## OS2 MCQ

1. In \_\_\_\_\_ information is recorded magnetically on platters.

- a) magnetic disks      b) electrical disks      c) assemblies      d) cylinders

Answer: a

2. The heads of the magnetic disk are attached to a \_\_\_\_\_ that moves all the heads as a unit.

- a) spindle      b) disk arm      c) track      d) none of the mentioned

Answer: b

3. The set of tracks that are at one arm position make up a \_\_\_\_\_

- a) magnetic disks      b) electrical disks      c) assemblies      d) cylinders

Answer: d

4. The time taken to move the disk arm to the desired cylinder is called the \_\_\_\_\_

- a) positioning time      b) random access time      c) seek time      d) rotational latency

Answer: c

5. The time taken for the desired sector to rotate to the disk head is called \_\_\_\_\_

- a) positioning time      b) random access time      c) seek time      d) rotational latency

Answer: d

6. When the head damages the magnetic surface, it is known as \_\_\_\_\_

- a) disk crash      b) head crash      c) magnetic damage      d) all of the mentioned

Answer: b

7. A floppy disk is designed to rotate \_\_\_\_\_ as compared to a hard disk drive.

- a) faster      b) slower      c) at the same speed      d) none of the mentioned

Answer: b

8. What is the host controller?

- a) controller built at the end of each disk      b) controller at the computer end of the bus  
c) all of the mentioned      d) none of the mentioned

Answer: b

9. \_\_\_\_\_ controller sends the command placed into it, via messages to the \_\_\_\_\_ controller.

- a) host, host      b) disk, disk      c) host, disk      d) disk, host

Answer: c

10. What is the disk bandwidth?

- a) the total number of bytes transferred      b) total time between the first request for service and the completion on the last transfer  
c) the total number of bytes transferred divided by the total time between the first request for service and the completion on the last transfer  
d) none of the mentioned

Answer: c

1. Whenever a process needs I/O to or from a disk it issues a \_\_\_\_\_

- a) system call to the CPU      b) system call to the operating system  
c) a special procedure      d) all of the mentioned

Answer: b

2. If a process needs I/O to or from a disk, and if the drive or controller is busy then \_\_\_\_\_

- a) the request will be placed in the queue of pending requests for that drive  
b) the request will not be processed and will be ignored completely      c) the request will be not be placed  
d) none of the mentioned

Answer: a

3. Consider a disk queue with requests for I/O to blocks on cylinders.

98 183 37 122 14 124 65 67

Considering FCFS (first cum first served) scheduling, the total number of head movements is, if the disk head is

initially at 53 is?      a) 600      b) 620      c) 630      d) 640

Answer: d

4. Consider a disk queue with requests for I/O to blocks on cylinders.

98 183 37 122 14 124 65 67

Considering SSTF (shortest seek time first) scheduling, the total number of head movements is, if the disk head is initially at 53 is?      a) 224      b) 236      c) 245      d) 240

Answer: b

5. Random access in magnetic tapes is \_\_\_\_\_ compared to magnetic disks.

a) fast      b) very fast      c) slow      d) very slow      Answer: d

6. Magnetic tape drives can write data at a speed \_\_\_\_\_ disk drives.

a) much lesser than      b) comparable to      c) much faster than      d) none of the mentioned

Answer: b

7. On media that use constant linear velocity (CLV), the \_\_\_\_\_ is uniform.

a) density of bits on the disk      b) density of bits per sector      c) the density of bits per track  
d) none of the mentioned      Answer: c

8. SSTF algorithm, like SJF \_\_\_\_\_ of some requests.      a) may cause starvation

b) will cause starvation      c) does not cause starvation      d) causes aging

Answer: a

9. In the \_\_\_\_\_ algorithm, the disk arm starts at one end of the disk and moves toward the other end, servicing requests till the other end of the disk. At the other end, the direction is reversed and servicing continues.

a) LOOK      b) SCAN      c) C-SCAN      d) C-LOOK

Answer: b

10. In the \_\_\_\_\_ algorithm, the disk head moves from one end to the other, servicing requests along the way. When the head reaches the other end, it immediately returns to the beginning of the disk without servicing any requests on the return trip.

a) LOOK      b) SCAN      c) C-SCAN      d) C-LOOK

Answer: c

11. In the \_\_\_\_\_ algorithm, the disk arm goes as far as the final request in each direction, then reverses direction immediately without going to the end of the disk.

a) LOOK      b) SCAN      c) C-SCAN      d) C-LOOK

Answer: a

1. The process of dividing a disk into sectors that the disk controller can read and write, before a disk can store data is known as \_\_\_\_\_ a) partitioning      b) swap space creation      c) low-level formatting  
d) none of the mentioned

Answer: c

2. The data structure for a sector typically contains \_\_\_\_\_ a) header      b) data area      c) trailer  
d) all of the mentioned

Answer: d

3. The header and trailer of a sector contain information used by the disk controller such as \_\_\_\_\_ and \_\_\_\_\_

a) main section & disk identifier      b) error correcting codes (ECC) & sector number  
c) sector number & main section      d) disk identifier & sector number

Answer: b

4. The two steps the operating system takes to use a disk to hold its files are \_\_\_\_\_ and \_\_\_\_\_

a) partitioning & logical formatting      b) swap space creation & caching  
c) caching & logical formatting      d) logical formatting & swap space creation

Answer: a

5. The \_\_\_\_\_ program initializes all aspects of the system, from CPU registers to device controllers and the contents of main memory, and then starts the operating system.

a) main            b) bootloader            c) bootstrap            d) rom

Answer: c

6. For most computers, the bootstrap is stored in \_\_\_\_ a) RAM            b) ROM            c) Cache            d) Tertiary storage

Answer: b

7. A disk that has a boot partition is called a \_\_\_\_ a) start disk            b) end disk

c) boot disk            d) all of the mentioned

Answer: c

8. Defective sectors on disks are often known as \_\_\_\_ a) good blocks            b) destroyed blocks

c) bad blocks            d) none of the mentioned

Answer: c

9. In SCSI disks used in high end PCs, the controller maintains a list of \_\_\_\_\_ on the disk. The disk is initialized during \_\_\_\_\_ which sets aside spare sectors not visible to the operating system.

a) destroyed blocks, high level formatting            b) bad blocks, partitioning

c) bad blocks, low level formatting            d) destroyed blocks, partitioning

Answer: c

10. In SCSI disks used in high end PCs, the controller maintains a list of bad blocks on the disk. The disk is initialized during low-level formatting which sets aside spare sectors not visible to the operating system. The scheme used is known as \_\_\_\_\_ or \_\_\_\_\_

a) sector sparing & forwarding            b) forwarding & sector utilization            c) backwarding & forwarding

d) sector utilization & backwarding

Answer: a

11. An unrecoverable error is known as \_\_\_\_ a) hard error            b) tough error            c) soft error

d) none of the mentioned

Answer: a

1. Virtual memory uses disk space as an extension of \_\_\_\_ a) secondary storage            b) main memory

c) tertiary storage            d) none of the mentioned

Answer: b

2. Using swap space significantly \_\_\_\_\_ system performance.

a) increases            b) decreases            c) maintains            d) does not affect

Answer: b

- Disk access is much slower than memory access.

3. Linux \_\_\_\_\_ the use of multiple swap spaces.

a) allows            b) does not allow            c) may allow            d) none of the mentioned

Answer: a

3- Putting these swap spaces on separate disks reduces the load places on the I/O system.

4. A single swap space \_\_\_\_\_ reside in two places.            a) can            b) cannot

c) must not            d) none of the mentioned

Answer: a

5. If the swap space is simply a large file, within the file system, \_\_\_\_\_ used to create it, name it and allocate its space.

a) special routines must be            b) normal file system routines can be

c) normal file system routines cannot be            d) swap space storage manager is

Answer: b

6. For swap space created in a separate disk partition where no file system or directory structure is placed, \_\_\_\_\_ used to allocate and deallocate the blocks.

a) special routines must be            b) normal file system routines can be

c) normal file system routines cannot be            d) swap space storage manager is

Answer: d

7. When a fixed amount of swap space is created during disk partitioning, more swap space can be added only by?

I) repartitioning of the disk

II) adding another swap space elsewhere

a) only I      b) only II      c) both I and II      d) neither I nor II

Answer: c

8. In UNIX, two per process \_\_\_\_\_ are used by the kernel to track swap space use.

a) process tables      b) swap maps      c) memory maps      d) partition maps

Answer: b

9. It is \_\_\_\_\_ to reread a page from the file system than to write it to swap space and then to reread it from there.

a) useless      b) less efficient      c) more efficient      d) none of the mentioned

Answer: c

### **==--==-- file systems==--==--**

1. \_\_\_\_\_ is a unique tag, usually a number identifies the file within the file system.

a) File identifier      b) File name      c) File type      d) None of the mentioned

Answer: a

2. 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) none of the mentioned

Answer: c

3. By using the specific system call, we can \_\_\_\_\_

a) open the file      b) read the file      c) write into the file      d) all of the mentioned

Answer: d

4. File type can be represented by \_\_\_\_\_

a) file name      b) file extension      c) file identifier      d) none of the mentioned

Answer: b

5. 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

Answer: a

6. What is the mounting of file system?

a) creating of a filesystem      b) deleting a filesystem      c) attaching portion of the file system into a directory structure  
d) removing the portion of the file system into a directory structure

Answer: c

7. Mapping of file is managed by \_\_\_\_\_ a) file metadata      b) page table      c) virtual memory

d) file system

Answer: a

8. 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

Answer: a

9. 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

Answer: b

10. When will file system fragmentation occur?

a) unused space or single file are not contiguous      b) used space is not contiguous  
c) unused space is non-contiguous      d) multiple files are non-contiguous

Answer: a

1. Management of metadata information is done by \_\_\_\_\_ a) file-organisation module  
b) logical file system c) basic file system d) application programs

Answer: b

2. A file control block contains the information about \_\_\_\_\_

a) file ownership b) file permissions c) location of file contents d) all of the mentioned

Answer: d

3. Which table contains the information about each mounted volume?

a) mount table b) system-wide open-file table  
c) per-process open-file table d) all of the mentioned

Answer: d

4. To create a new file application program calls \_\_\_\_\_

a) basic file system b) logical file system c) file-organisation module  
d) none of the mentioned

Answer: b

5. What will happens when a process closes the file?

a) per-process table entry is not removed b) system wide entry's open count is decremented  
c) all of the mentioned d) none of the mentioned

Answer: b

6. What is raw disk?

a) disk without file system b) empty disk c) disk lacking logical file system d) disk having file system

Answer: a

7. The data structure used for file directory is called \_\_\_\_\_

a) mount table b) hash table c) file table d) process table

Answer: b

8. 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

Answer: a

9. If the block of free-space list is free then bit will \_\_\_\_\_ a) 1 b) 0 c) any of 0 or 1  
d) none of the mentioned

Answer: a

10. Which protocol establishes the initial logical connection between a server and a client?

a) transmission control protocol b) user datagram protocol c) mount protocol  
d) datagram congestion control protocol

Answer: c

1. Data cannot be written to secondary storage unless written within a \_\_\_\_\_

a) file b) swap space c) directory d) text format

Answer: a

2. File attributes consist of \_\_\_\_\_ a) name b) type c) identifier d) all of the mentioned

Answer: d

3. The information about all files is kept in \_\_\_\_\_

a) swap space b) operating system c) separate directory structure d) none of the mentioned

Answer: c

4. A file is a/an \_\_\_\_\_ data type.

a) abstract b) primitive c) public d) private

Answer: a

5. 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

Answer: b

6. In UNIX, what will the open system call return?

a) pointer to the entry in the open file table                  b) pointer to the entry in the system wide table  
c) a file to the process calling it                  d) none of the mentioned

Answer: a

7. System wide table in UNIX contains process independent information such as \_\_\_\_\_

a) location of file on disk                  b) access dates                  c) file size                  d) all of the mentioned

Answer: d

8. The open file table has a/an \_\_\_\_\_ associated with each file.

a) file content                  b) file permission                  c) open count                  d) close count

Answer: c

- open count indicates the number of processes that have the file open.

9. Which of the following are the two parts of the file name?

a) name & identifier                  b) identifier & type                  c) extension & name                  d) type & extension

Answer: c

1. The UNIX system uses a/an \_\_\_\_\_ stored at the beginning of some files to indicate roughly the type of file.

a) identifier                  b) extension                  c) virtual number                  d) magic number

Answer: d

2. The larger the block size, the \_\_\_\_\_ the internal fragmentation.

a) greater                  b) lesser                  c) same                  d) none of the mentioned

Answer: a

3. In the sequential access method, information in the file is processed \_\_\_\_\_

a) one disk after the other, record access doesn't matter                  b) one record after the other  
c) one text document after the other  
d) none of the mentioned

Answer: b

4. Sequential access method \_\_\_\_\_ on random access devices.

a) works well                  b) doesn't work well                  c) maybe works well and doesn't work well                  d) none of the mentioned

Answer: a

5. The direct access method is based on a \_\_\_\_\_ model of a file, as \_\_\_\_\_ allow random access to any file block.

a) magnetic tape, magnetic tapes                  b) tape, tapes                  c) disk, disks                  d) all of the mentioned

Answer: c

6. 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

Answer: b

7. A relative block number is an index relative to \_\_\_\_\_

a) the beginning of the file                  b) the end of the file  
c) the last written position in file                  d) none of the mentioned

Answer: a

8. The index contains \_\_\_\_\_

a) names of all contents of file                  b) pointers to each page  
c) pointers to the various blocks                  d) all of the mentioned

Answer: c

9. For large files, when the index itself becomes too large to be kept in memory?

a) index is called                  b) an index is created for the index file

c) secondary index files are created      d) all of the mentioned

Answer: b

1. An absolute path name begins at the \_\_\_\_\_ a) leaf      b) stem      c) current directory      d) root

Answer: d

2. A relative path name begins at the \_\_\_\_\_ a) leaf      b) stem      c) current directory      d) root

Answer: c

3. In a tree structure, when deleting a directory that is not empty?

a) The contents of the directory are safe      b) The contents of the directory are also deleted

c) contents of the directory are not deleted      d) none of the mentioned

Answer: b

4. When two users keep a subdirectory in their own directories, the structure being referred to is \_\_\_\_\_

a) tree structure      b) cyclic graph directory structure      c) two level directory structure

d) acyclic graph directory

Answer: d

5. A tree structure \_\_\_\_\_ the sharing of files and directories.

a) allows      b) may restrict      c) restricts      d) none of the mentioned

Answer: c

6. With a shared file \_\_\_\_\_ a) actual file exists      b) there are two copies of the file

c) the changes made by one person are not reflected to the other      d) the changes made by one person are reflected to the other

Answer: d

7. In UNIX, what is a link?      a) a directory entry

b) a pointer to another file or subdirectory      c) implemented as an absolute or relative path name

d) all of the mentioned

Answer: d

8. The operating system \_\_\_\_\_ the links when traversing directory trees, to preserve the acyclic structure of the system.

a) considers      b) ignores      c) deletes      d) none of the mentioned

Answer: b

9. The deletion of a link \_\_\_\_\_ the original file.

a) deletes      b) affects      c) does not affect      d) none of the mentioned

Answer: c

10. When keeping a list of all the links/references to a file, and the list is empty, implies that \_\_\_\_\_

a) the file has no copies      b) the file is deleted

c) the file is hidden      d) none of the mentioned

Answer: b

11. When a cycle exists, the reference count maybe non zero, even when it is no longer possible to refer to a directory or file, due to \_\_\_\_\_

a) the possibility of one hidden reference      b) the possibility of two hidden references

c) the possibility of self referencing      d) none of the mentioned

Answer: c

1. What is the mount point?

a) an empty directory at which the mounted file system will be attached      b) a location where every time file systems are mounted      c) is the time when the mounting is done      d) none of the mentioned

Answer: a

2. When a file system is mounted over a directory that is not empty then \_\_\_\_\_

a) the system may not allow the mount      b) the system must allow the mount

- c) the system may allow the mount and the directory's existing files will then be made obscure  
d) all of the mentioned

Answer: c

3. In UNIX, exactly which operations can be executed by group members and other users is definable by

- \_\_\_\_\_
- a) the group's head      b) the file's owner      c) the file's permissions      d) all of the mentioned

Answer: b

4. A process \_\_\_\_\_ lower the priority of another process if both are owned by the same owner.

- a) must      b) can      c) cannot      d) none of the mentioned

Answer: b

5. In distributed file system \_\_\_\_\_ directories are visible from the local machine.

- a) protected      b) local      c) private      d) remote

Answer: d

6. In the world wide web, a \_\_\_\_\_ is needed to gain access to the remote files, and separate operations are used to transfer files.

- a) laptop      b) plugin      c) browser      d) player

Answer: c

7. Anonymous access allows a user to transfer files \_\_\_\_\_

- a) without having an account on the remote system      b) only if he accesses the system with a guest account  
c) only if he has an account on the remote system      d) none of the mentioned

Answer: a

8. The machine containing the files is the \_\_\_\_\_ and the machine wanting to access the files is the \_\_\_\_\_

- a) master, slave      b) memory, user      c) server, client      d) none of the mentioned

Answer: c

9. Distributed naming services/Distributed information systems have been devised to \_\_\_\_\_

- a) provide information about all the systems      b) provide unified access to the information needed for remote computing  
c) provide unique names to all systems in a network      d) all of the mentioned

Answer: b

10. Domain name system provides \_\_\_\_\_

- a) host-name-to-network-address translations for the entire internet  
b) network-address-to-host-name translations for the entire internet  
c) binary to hex translations for the entire internet  
d) all of the mentioned

Answer: a

11. To recover from failures in the network operations \_\_\_\_\_ information may be maintained.

- a) ip address      b) state      c) stateless      d) operating system

Answer: b

12. The series of accesses between the open and close operations is a \_\_\_\_\_

- a) transaction      b) procedure      c) program      d) file session

Answer: d

1. Reliability of files can be increased by \_\_\_\_\_

- a) keeping the files safely in the memory      b) making a different partition for the files  
c) by keeping them in external storage      d) by keeping duplicate copies of the file

Answer: d

2. Protection is only provided at the \_\_\_\_\_ level.      a) lower      b) central      c) higher      d) none of the mentioned

Answer: a

3. What is the main problem with access control lists?



- a) their maintenance    b) their length    c) their permissions    d) all of the mentioned

Answer: b

4. Many systems recognize three classifications of users in connection with each file (to condense the access control list).

- a) Owner    b) Group    c) Universe    d) All of the mentioned

Answer: d

5. All users in a group get \_\_\_\_\_ access to a file.

- a) different    b) similar    c) same    d) none of the mentioned

Answer: b

6. Universe consists of \_\_\_\_\_

- a) all users that aren't included in the group or owners    b) all users that are not owners  
c) all users in the system    d) none of the mentioned

Answer: c

7. In UNIX, groups can be created and modified by?

- a) superuser    b) any user  
c) a programmer only    d) the people in the group only

Answer: a

8. To control access the three bits used in UNIX are represented by \_\_\_\_\_

- a) r    b) w    c) x    d) all of the mentioned

Answer: d

9. If each access to a file is controlled by a password, then what is the disadvantage?

- a) user will need to remember a lot of passwords    b) it is not reliable  
c) it is not efficient    d) all of the mentioned

Answer: a

10. What will happen in a multi level directory structure?    a) the same previous techniques will be used as in the other structures    b) a mechanism for directory protection will have to applied

- c) the subdirectories do not need protection once the directory is protected    d) none of the mentioned

Answer: b

11. In UNIX, the directory protection is handled \_\_\_\_\_ to the file protection.

- a) different    b) similar    c) it is not handled at all    d) none of the mentioned

Answer: b

12. Disks are segmented into one or more partitions, each containing a file system or \_\_\_\_\_

- a) left 'raw'    b) made into swap space    c) made into backup space    d) left 'ripe'

Answer: a

### **====Security=====**

1. Which of the following are forms of malicious attack?

- a) Theft of information    b) Modification of data    c) Wiping of information    d) All of the mentioned

Answer: d

2. What are the common security threats?

- a) File Shredding    b) File sharing and permission    c) File corrupting    d) File integrity

Answer: b

3. From the following, which is not a common file permission?

- a) Write    b) Execute    c) Stop    d) Read

Answer: c

4. Which of the following is a good practice?

- a) Give full permission for remote transferring    b) Grant read only permission

- c) Grant limited permission to specified account      d) Give both read and write permission but not execute

Answer: c

5. What is not a good practice for user administration?

- a) Isolating a system after a compromise  
b) Perform random auditing procedures  
c) Granting privileges on a per host basis  
d) Using telnet and FTP for remote access

Answer: d

6. Which of the following is the least secure method of authentication?

- a) Key card      b) fingerprint      c) retina pattern      d) Password

Answer: d

7. Which of the following is a strong password?

- a) 19thAugust88      b) Delhi88      c) P@assw0rd  
d) !augustdelhi

Answer: c

### 8. Why is one time password safe?

- a) It is easy to generate encrypted password      b) It cannot be shared      c) It is different for every access      d) It is a complex password

Answer: c

### 9. What does Light Directory Access Protocol (LDAP) doesn't store?

- a) Users      b) Address      c) Passwords      d) Security Keys

Answer: b

10. What is characteristic of RADIUS system?

- a) It is essential for centralized encryption and authentication
- b) It works on Network layer to deny access to unauthorized people
- c) It provides centralized authentication mechanism via network devices
- d) It's a strong File access system

Answer: c

11. Which happens first authorization or authentication?

- a) Authorization mentioned      b) Authentication      c) Authorization & Authentication are same      d) None of the

Answer: a

## 12. What are the characteristics of Authorization?

- a) RADIUS and RSA      b) 3 way handshaking with syn and fin  
c) Multilayered protection for securing resources      d) Deals with privileges and rights

Answer: d

13. What forces the user to change password at first login?

- a) Default behavior of OS      b) Part of AES encryption practice      c) Devices being accessed forces the user  
d) Account administrator

Answer: d

14. What is not a best practice for password policy?

- a) Deciding maximum age of password    b) Restriction on password reuse and history  
c) Password encryption                      d) Having change password every 2 years

Answer: d

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**“Security – Program and System Threats”.**

1. What is the breach of integrity?

- a) This type of violation involves unauthorized reading of data      b) This violation involves unauthorized

modification of data    c) This violation involves unauthorized destruction of data  
d) This violation involves unauthorized use of resources

Answer: b

2. What is breach of confidentiality?

a) This type of violation involves unauthorized reading of data    b) This violation involves unauthorized modification of data    c) This violation involves unauthorized destruction of data  
d) This violation involves unauthorized use of resources

Answer: a

3. What is theft of service?

a) This type of violation involves unauthorized reading of data    b) This violation involves unauthorized modification of data    c) This violation involves unauthorized destruction of data  
d) This violation involves unauthorized use of resources

4. What is breach of availability?

a) This type of violation involves unauthorized reading of data  
b) This violation involves unauthorized modification of data  
c) This violation involves unauthorized destruction of data  
d) This violation involves unauthorized use of resources

Answer: c

5. What is Trojan horse?

a) It is a useful way to encrypt password    b) It is a user which steals valuable information  
c) It is a rogue program which tricks users    d) It's a brute force attack algorithm

Answer: c

6. What is trap door?

a) It is trap door in WarGames    b) It is a hole in software left by designer  
c) It is a Trojan horse    d) It is a virus which traps and locks user terminal

Answer: b

7. Which mechanism is used by worm process?

a) Trap door    b) Fake process    c) Spawn Process    d) VAX process

Answer: c

8. Which of the following is not a characteristic of a virus?

a) Virus destroy and modify user data    b) Virus is a standalone program  
c) Virus is a code embedded in a legitimate program    d) Virus cannot be detected

View Answer

Answer: d

9. What is known as masquerading?

a) When one participant in communication pretends to be someone else  
b) When attacker modifies data in communication    c) When attack is of fraudulent repeat of a valid data  
d) When attack gains access to remote systems

Answer: a

10. Who unleashed famous worm attack in 1988 which effected UNIX systems and caused losses in millions?

a) Robert Morris    b) Bob Milano    c) Mark Zuckerberg    d) Bill Gates

Answer: a

11. What is port scanning?

a) It is a software used to scan system for attack  
b) It is a software application designed to probe a server or host for open ports  
c) It is software used to scan system for introducing attacks by brute force  
d) None of the mentioned

Answer: b

12. Which is not a port scan type?

- a) TCP scanning      b) SYN scanning      c) UDP scanning      d) SYSTEM Scanning

Answer: d

13. Which is not a valid port scan type?

- a) ACK scanning      b) Window scanning      c) IGMP scan      d) FIN scanning

Answer: c

14. What are zombie systems?

- a) Are specific system which are designed to attack by manufacturer  
b) They are network of known hacking group      c) These systems are previously compromised independent systems  
d) None of the mentioned      Answer: c

15. What is known as a DOS attack?

- a) It is attacked to block traffic of network  
b) It is attacked to harm contents stored in HDD by worm spawn processes  
c) It is an attempt to make a machine or network resource unavailable  
d) None of the mentioned

Answer: c

16. With regard to DOS attack what is not true from below options?

- a) We can stop DOS attack completely      b) By upgrading OS vulnerability we can stop DOS attack to some extent  
c) DOS attack has to be stopped at network level      d) Such attack can last for hours

Answer: a

==--=====--

1. What is not an important part of security protection?

- a) Large amount of RAM to support antivirus      b) Strong passwords  
c) Audit log periodically      d) Scan for unauthorized programs in system directories

Answer: a

==--

1. What are the different ways to intrude?

- a) Buffer overflows      b) Unexpected combinations and unhandled input  
c) Race conditions      d) All of the mentioned

Answer: d

2. What are the major components of the intrusion detection system?

- a) Analysis Engine      b) Event provider      c) Alert Database      d) All of the mentioned

Answer: d

3. What are the different ways to classify an IDS?

- a) anomaly detection      b) signature based misuse      c) stack based      d) all of the mentioned

Answer: d

4. What are the different ways to classify an IDS?

- a) Zone based      b) Host & Network based      c) Network & Zone based      d) Level based

Answer: b

5. What are the characteristics of anomaly based IDS?

- a) It models the normal usage of network as a noise characterization      b) It doesn't detect novel attacks  
c) Anything distinct from the noise is not assumed to be intrusion activity      d) It detects based on signature

Answer: a

6. What is the major drawback of anomaly detection IDS?

- a) These are very slow at detection      b) It generates many false alarms  
c) It doesn't detect novel attacks      d) None of the mentioned

Answer: b

7. What are the characteristics of signature based IDS?

- a) Most are based on simple pattern matching algorithms
- b) It is programmed to interpret a certain series of packets
- c) It models the normal usage of network as a noise characterization
- d) Anything distinct from the noise is assumed to be intrusion activity

Answer: a

8. What are the drawbacks of signature based IDS?

- a) They are unable to detect novel attacks
- b) They suffer from false alarms
- c) They have to be programmed again for every new pattern to be detected
- d) All of the mentioned

Answer: d

9. What are the characteristics of Host based IDS?

- a) The host operating system logs in the audit information
- b) Logs includes logins, file opens and program executions
- c) Logs are analysed to detect tails of intrusion
- d) All of the mentioned

Answer: d

10. What are the drawbacks of the host based IDS?

- a) Unselective logging of messages may increase the audit burdens
- b) Selective logging runs the risk of missed attacks
- c) They are very fast to detect
- d) They have to be programmed for new patterns

Answer: a

11. What are the strengths of the host based IDS?

- a) Attack verification
- b) System specific activity
- c) No additional hardware required
- d) All of the mentioned

Answer: d

12. What are characteristics of stack based IDS?

- a) They are integrated closely with the TCP/IP stack and watch packets
- b) The host operating system logs in the audit information
- c) It is programmed to interpret a certain series of packets
- d) It models the normal usage of network as a noise characterization

View Answer

Answer: a

13. What are characteristics of Network based IDS?

- a) They look for attack signatures in network traffic
- b) Filter decides which traffic will not be discarded or passed
- c) It is programmed to interpret a certain series of packet
- d) It models the normal usage of network as a noise characterization

Answer: a

14. What are strengths of Network based IDS?

- a) Cost of ownership reduced
- b) Malicious intent detection
- c) Real time detection and response
- d) All of the mentioned

Answer: d

==== **"Protection – Access Matrix".**

1. In domain structure what is Access-right equal to?

- a) Access-right = object-name, rights-set
- b) Access-right = read-name, write-set
- c) Access-right = read-name, execute-set
- d) Access-right = object-name, execute-set

Answer: a

2. What is meaning of right-set?

- a) It is a subset consist of read and write
- b) It is a subset of all valid operations that can be performed on the object
- c) It is a subset consist of read, write and execute
- d) None of the mentioned

Answer: b

3. What is Domain?

- a) Domain = Set of all objects    b) It is a collection of protection policies
- c) Domain = set of access-rights    d) None of the mentioned

Answer: c

4. What does the access matrix represent?

- a) Rows-Domains, Columns-Objects    b) Rows-Objects, Columns-Domains
- c) Rows-Access List, Columns-Domains    d) Rows-Domains, Columns-Access list

Answer: a

5. What are the three additional operations to change the contents of the access-matrix?

- a) copy    b) Owner    c) control    d) all of the mentioned

Answer: d

6. Who can add new rights and remove some rights?

- a) copy    b) transfer    c) limited copy    d) owner

Answer: d

7. What are the three copyrights?

- a) copy    b) transfer    c) limited copy    d) all of the mentioned

Answer: d

8. Which two rights allow a process to change the entries in a column?

- a) copy and transfer    b) copy and owner    c) owner and transfer    d) deny and copy

Answer: a.

9. Which is an unsolvable problem in access-matrix?

- a) Owner override    b) Brute force    c) Access denied    d) Confinement

Answer: d

10. Which of the following objects require protection?

- a) CPU    b) Printers    c) Motherboard    d) All of the mentioned

Answer: b

11. What is 'separation' in security of Operating systems?

- a) To have separate login for different users    b) To have separate Hard disk drive/partition for different users
- c) It means keeping one user's objects separate from other users    d) None of the mentioned

Answer: c

12. Which of the following statements are correct?

- i) Physical separation – in which process use different physical objects like separate printers
  - ii) Physical separation – in which process having different security requirement at different times
  - iii) Logical separation – In which users operate under illusion that no other processes exist
  - iv) Logical separation – In which processes conceal their data and computations
- a) I    b) i and iii    c) ii and iii    d) iii and iv    Answer: b

13. Which of the following statements are correct?

- i) Physical separation – in which process use different physical objects like separate printers
  - ii) Temporal separation – in which process having different security requirement at different times
  - iii) Physical separation – In which users operate under illusion that no other processes exist
  - iv) Temporal separation – In which processes conceal their data and computations
- a) I    b) i and ii    c) ii and iii    d) iii and iv

Answer: b

14. Which of the following statements are correct?

- i) logical separation – in which process use different physical objects like separate printers
- ii) cryptographic separation – in which process having different security requirement at different times

iii) Logical separation – In which users operate under illusion that no other processes exist  
iv) cryptographic separation – In which processes conceal their data and computations

- a) I                      b) i and ii                      c) ii and iii                      d) iii and iv

Answer: d

15. What are the various roles of protection?

- a) It is used to detect errors which can prevent contamination of system  
b) It is used used to accelerate a process                      c) It is used to optimize system downtime  
d) None of the mentioned                      Answer: a

16. Which of the following objects require protection?

- a) Memory                      b) Monitor                      c) Power supply unit                      d) All of the mentioned

Answer: a

**==--==“Distributed Operating System”.**

1. In distributed system, each processor has its own \_\_\_\_\_

- a) local memory                      b) clock                      c) both local memory and clock                      d) none of the mentioned

Answer: c

2. If one site fails in distributed system then \_\_\_\_\_

- a) the remaining sites can continue operating                      b) all the sites will stop working  
c) directly connected sites will stop working                      d) none of the mentioned

Answer: a

3. Network operating system runs on \_\_\_\_\_

- a) server                      b) every system in the network                      c) both server and every system in the network  
d) none of the mentioned

Answer: a

4. Which technique is based on compile-time program transformation for accessing remote data in a distributed-memory parallel system?

- a) cache coherence scheme                      b) computation migration                      c) remote procedure call  
d) message passing

Answer: b

5. Logical extension of computation migration is \_\_\_\_\_

- a) process migration                      b) system migration                      c) thread migration                      d) data migration

Answer: a

6. Processes on the remote systems are identified by \_\_\_\_\_

- a) host ID                      b) host name and identifier                      c) identifier                      d) process ID

Answer: b

7. Which routing technique is used in a distributed system?

- a) fixed routing                      b) virtual routing                      c) dynamic routing                      d) all of the mentioned

Answer: d

8. In distributed systems, link and site failure is detected by \_\_\_\_\_

- a) polling                      b) handshaking                      c) token passing                      d) none of the mentioned

Answer: b

9. The capability of a system to adapt the increased service load is called \_\_\_\_\_

- a) scalability                      b) tolerance                      c) capacity                      d) none of the mentioned

Answer: a

10. Internet provides \_\_\_\_\_ for remote login.

- a) telnet                      b) http                      c) ftp                      d) rpc

Answer: a

**==--== “Distributed Operating System – Types & Resource Sharing”.**

1. What is not true about a distributed system?

- a) It is a collection of processor                      b) All processors are synchronized
- c) They do not share memory                      d) None of the mentioned

Answer: b

2. What are the characteristics of processor in distributed system?

- a) They vary in size and function                      b) They are same in size and function
- c) They are manufactured with single purpose                      d) They are real-time devices

Answer: a

3. What are the characteristics of a distributed file system?

- a) Its users, servers and storage devices are dispersed                      b) Service activity is not carried out across the network
- c) They have single centralized data repository                      d) There are multiple dependent storage devices

Answer: a

4. What is not a major reason for building distributed systems?

- a) Resource sharing                      b) Computation speedup                      c) Reliability                      d) Simplicity

Answer: d

5. What are the types of distributed operating system?

- a) Network Operating system                      b) Zone based Operating system                      c) Level based Operating system
- d) All of the mentioned

Answer: a

6. What are characteristic of Network Operating Systems?

- a) Users are aware of multiplicity of machines                      b) They are transparent
- c) They are simple to use                      d) All of the mentioned

Answer: a

7. How is access to resources of various machines is done?

- a) Remote logging using ssh or telnet                      b) Zone are configured for automatic access
- c) FTP is not used                      d) All of the mentioned

Answer: a

8. What are the characteristics of Distributed Operating system?

- a) Users are aware of multiplicity of machines                      b) Access is done like local resources
- c) Users are aware of multiplicity of machines                      d) They have multiple zones to access files

Answer: b

9. What are the characteristics of data migration?

- a) transfer data by entire file or immediate portion required                      b) transfer the computation rather than the data
- c) execute an entire process or parts of it at different sites                      d) none of the mentioned

Answer: a

10. What are the characteristics of computation migration?

- a) transfer data by entire file or immediate portion required                      b) transfer the computation rather than the data
- c) execute an entire process or parts of it at different sites                      d) none of the mentioned

Answer: b

11. What are the characteristics of process migration?

- a) transfer data by entire file or immediate portion required                      b) transfer the computation rather than the data
- c) execute an entire process or parts of it at different sites                      d) none of the mentioned

Answer: c