

Section-3

Q1. Write short note on:

- (i) File system protection & security
- (ii) Linked file allocation methods.

Answer

(i) Protection and security requires that computer resources such as CPU, software, memory etc. are protected. This extends to the operating system as well as the data in the system.

- Threats to protection & security \Rightarrow A Threat is a program that is malicious in nature & leads to thoughtful effects for the system.
- Virus \Rightarrow Viruses are generally small and nibbets of code embedded in a system.

- (i) Trojan horse
- (ii) Trap Doors
- (iii) Worm
- (iv) Denial of service
- (v) Protection & security methods.
- (vi) Authentication.

(ii) Linked File allocation methods :- The allocation method defines how the files are stored in the disk block. The direct access nature of the disks give us the flexibility to implement the files. In many cases, dispersed the files or many files problem that occurs in the operation system that occurs in that how we allocate the space to these files.

- Contiguous allocation
- Linked allocation
- Indexed allocation.

The main idea behind contiguous allocation method to provide

- Efficient disk space utilization
- Fast access to the file blocks.