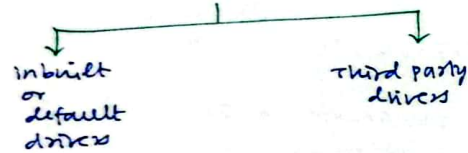# OPERATING SYSTEM

HARDWARE ACCESS

DEVICE DRIVER: program to access every hardware component
- Identify device
- Register device : REGISTRY
  database that contains all info about the computer

→ inbuilt or default drives

→ Third party drives

MANAGE FILES AND FOLDERS

FILE - Block of related data in a single unit
→ program   → Data

DIRECTORIES & SUB-DIRS.
→ nested directories

in windows: called FOLDERS and SUB-FOLDERS

USER INTERFACE

→ GUI
Graphical user interface
- Menus
- Icons

→ CLI
command line interface

MANAGE APPS.

- locates application and loads it onto the RAM.
- allocates available system resources to running apps.

APIs
(Application Programming interfaces)
- To ensure that an app is compatible with the OS
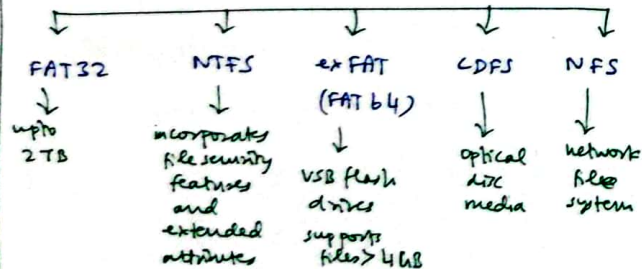- set of guidelines.

INSTALL OS

over a network server Preboot Execution Environment (PXE)	local hard drive — (IMAGE BASED) — (system restore)	External Media — CD/DVD — USB

FORMATTING & FILE SYSTEM
provides the directory structure

FAT32	NTFS	ex FAT (FAT 64)	CDFS	NFS
upto 2 TB	incorporates file security features and extended attributes	USB flash drives supports files > 4 GB	optical disc media	network file system

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HARD DRIVE PARTITIONING
standards

→ Master Boot Record (MBR)
↓
Boot loader program BIOS/UEFI
max 4 partitions

→ GUID-PT/GPT
Globally unique identifier partition Table
↓
max 128 partitions

PRIMARY
- contains the OS files
- 1st partition
- cannot be subdivided in MBR
- in GBT - all are primary partitions

ACTIVE
- only applies to MBR
- invariably c:/ becomes the default active partition

EXTENDED
- logical drive
- separate info for admin purposes.