Kernel

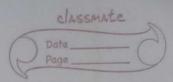
Kernal is central component of an operation of Computer System that manage operation of Computer and hardwork. 9t basically manage operation of memory and countime. 9th Core component of an operating system Kernel act as a bridge between application and data processing performed at hardware level using inter-process. Communication and System Calls.

Desating System is loaded and Demain into memory when an into memory when an into memory when an into memory until operating System is shut down again. It is the perating system is shut down again. It is the perating system is shut down again. It is the such as disk management, task management. and memory management

to processor to execute and which process Should be kept in main memory to exem 9t is basically act as an interface between user and hardware. The major aim of Kernel 1s to manage Communication between Software 1.2. User-level application and hardware I.e Cpu and disk memory

Destrue of Kernel

To establish Communication between Used level application and hardware



4) To Control disk management To Control & memory management 43 To decide State of incoming processes Kerner mode Vs Usea mode Kernel Mode party similaria a Hearnel mode reto refers to the processor mode that enables software to have full and unrestricted access to the System and its resource the os kernal and kernel driver Such as the file System driver are loaded
Into protected memory space and operate in
this highly privileged kernal mode

User mode La User mode defer to the processor mode that enables used application Such as Word processor or video game to load and execute. the Kerner prepares the memory space and respurce for the cipplication used and launche the application within that uses memory Space. 4) User mode application are less privileged and Cannot access System resource directly. Instead

an application running in user mode mus

make System Calls to the Kerney to access System resource. the Kerney then acts