Q1. Write down the advantages and disadvantages of Monolithic OS structure.

Advantages and disadvantages of monolithic OS Structure are :

|  |  |
| --- | --- |
| Advantages | Disadvantages |
| The execution time of the monolithic kernel is quite fast with services of memory management, file management, process scheduling and etcetera cause they are implemented under the same address space. | If any service fails in the monolithic kernel, it leads to the failure of the entire system. |
| The process runs entirely in a single address space in the monolithic kernel. Monolithic kernel is a single static binary file. | To add any new service the entire operating system needs to be modified by the user |

Q2. Write down advantages and disadvantages of Layered OS structure.

Advantages and disadvantages of layered OS Structure are :

|  |  |
| --- | --- |
| Advantages | Disadvantages |
| Allows implementers to change the inner workings and increases modularity | Difficulty in defining the various layers. |
| Simplicity in construction and debugging | The OS tends to be less efficient than the other implementations found |
| Developers have more freedom to change the inner workings of the routines |  |