Synchronous Transmission:

In Synchronous Transmission, data is sent in form of blocks or frames. This transmission is the full duplex type. Between sender and receiver the synchronization is compulsory. In Synchronous transmission, There is no gap present between data. It is more efficient and more reliable than asynchronous transmission to transfer the large amount of data.

Asynchronous Transmission:

In Asynchronous Transmission, data is sent in form of byte or character. This transmission is the half duplex type transmission. In this transmission start bits and stop bits are added with data. It does not require synchronization.

Now, let’s see the difference between Synchronous and Asynchronous Transmission:

|  |  |  |
| --- | --- | --- |
| S.NO | Synchronous Transmission | Asynchronous Transmission |
| 1. | In Synchronous transmission, Data is sent in form of blocks or frames. | In asynchronous transmission, Data is sent in form of byte or character. |
| 2. | Synchronous transmission is fast. | Asynchronous transmission is slow. |
| 3. | Synchronous transmission is costly. | Asynchronous transmission is economical. |
| 4. | In Synchronous transmission, time interval of transmission is constant. | In asynchronous transmission, time interval of transmission is not constant, it is random. |
| 5. | In Synchronous transmission, There is no gap present between data. | In asynchronous transmission, There is present gap between data. |