

## SRI VASAVI INSTITUTE OF ENGINEERING & TECHNOLOGY AN AUTONOMOUS INSTITUTE







Nandamuru, Pedana Mandal, Krishna Dist. – 521369

Department of Electronics & Communication Engineering

Course : AC(C223) A.Y: 2024-25

## **Differentiation**

Sr no.	FDM	TDM
1.	The signals which are to be multiplexed are added in the time domain. But they occupy different slots in the frequency domain.	The signals which are to be multiplexed can occupy the entire bandwidth in the time domain.
2.	FDM is usually preferred for the analog signals.	TDM is preferred for the digital signals.
3.	Synchronization is not required .	Synchronization is required .
4.	The FDM requires a complex circuitry at Tx and Rx .	TDM circuitry is not very complex .
5.	FDM suffers from the problem of crosstalk due to imperfect BPF .	In TDM the problem of crosstalk is not severe.
6.	Due to bandwidth fading in the Tx medium, all the FDM channels are affected.	Due to fading only a few TDM channels will be affected.
7.	Due to slow narrowband fading taking place in the transmission channel may be affected in FDM .	Due to slow narrowband fading all the TDM channels may get wiped out .