

CLASSMATE

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1) Frequency

divide

Division Multiplexing: Here, we divide the bandwidth of a physical medium into smaller, independent frequency channels. FDM is commonly used in radio and television transmission.

Time Division Multiplexing: Instead of dividing the bandwidth into channels like FDM, TDM divides time. Each connection occupies a portion of time in the link, allowing simultaneous transmission. Synchronous and statistical TDM are two variations of this method.

for

over a

Wavelength Division Multiplexing: WDM increases the capacity of optical fibers by transmitting multiple optical signals simultaneously over a single fiber, each

with a different wavelength of light. It's divided into Dense WDM & Coarse WDM, catering to different capacity requirements.

Code - Division Multiplexing: CDMA enables multiple users to transmit data simultaneously over a single channel by assigning each user a unique code to modulate their signal.

This technique provides increased capacity & level of security against interception and jamming.

over a

some level

or

Space- Division Multiplexing: SDM exploits physical separation by using multiple antennas

M

to create parallel communication channels. This method is commonly employed

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in wireless communication system  
allows



m like

caneously,

MIMO technology.

for multiple

users to transmit data simultane

without interference.

STOP.

shave the same

to

2) EDM divides the bandwidth into frequeng

channels, allowing multiple signals

media simultaneously.

but on different frequencies. TDM, on

the other hand, divides the bandwidth

into time slots, enabling different

signals to take

frequency.

STOP

take turns

turns using the same