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Cloud - Computing & Techniques

Ques: Technologies based on Network-based System

⇒ Network based systems are the backbone of modern technologies, enabling communication, collaboration, and data exchange.

• **PAN (Personal Area Network)**: This network is restricted to one person, i.e., communication between the computer devices is centered only on an individual's workspace. PAN offers network range of 1-100 metres from person to device providing communication. Its transmission speed is very high with very easy maintenance and very low cost.
Eg: Bluetooth, Zigbee Technologies

• **LAN (Local Area Network)**: It is most frequently used network. A LAN is a computer network that connects computers through a common communication path, contained within a limited area, that is, locally. A LAN encompasses two or more computers connected over a server. It ranges upto 2km & transmission speed is very high with easy maintenance and low cost.

eg: Ethernet, Wi-Fi.

MAN (Metropolitan Area Network): A MAN is larger than a LAN. This is the type of computer networks that connects computers over a geographical distance through a shared communication path over a city, town, or metropolitan area. This technology basically uses FDDI, CDDI, and ATM as the technology with a range from 5km-50km. Its transmission speed is average. It is difficult to maintain and it comes with a high cost.

WAN (Wide Area Network): It is a type of computer network that connects computers over large geographical distance through a shared communication path. It is not restricted to a single location but extends over many locations. WAN can also be defined as a group of local area networks that communicate with each other with a range above 50km.