

## Examrace

### Discussion on Computer Networks for Competitive Exams 2021

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#### Topics

- Definition of Computer Network
- Classification on Computer Network
- LAN and Its Merits & Demerits
- MAN and Its Merits & Demerits
- WAN and Its Merits & Demerits

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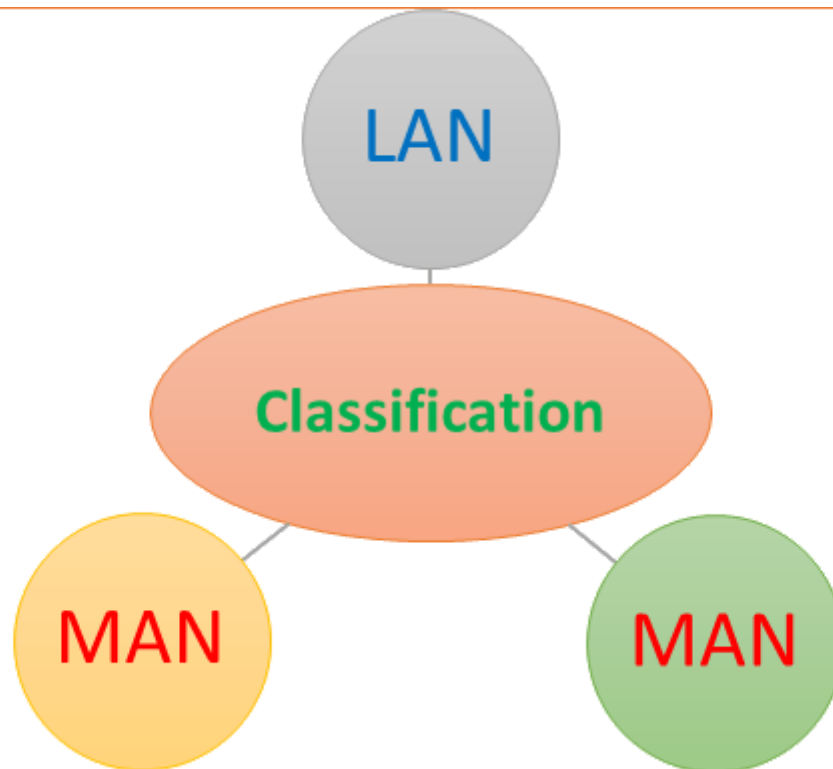
#### Definition of Computer Network

- Computer Network means that collection of computers that share various resources and provide services to the users.
- It is a interconnection of two or more computers.
- It may be of different types depending upon the requirement.

#### Applications of Computer Network

- Sharing of resources like printers.
- Exchange of messages and data
- Communication between computers

#### Classification of Computer Network



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## LAN

- LAN stands for Local Area Network
- It is usually private owned interconnection of computer
- The hardware and software can be shared among the resources or computers
- LAN is best suited for Campus Networking of Offices and Schools or any single building also
- It has data rates in the 4 to 16 Mbit/s range
- It can offer speed upto 1000Mbit/s

## Merits & Demerits of LAN

### Merits

- Sharing of databases, information and other network services.
- Cost reduction

### DeMerits

- Security measures are needed
- If server goes down, entire network will go down
- Network has to be maintained by technical experts.

### **Supported Topologies in LAN Are**

- Bus
- Ring
- Star

Software can be centrally stored and can be used among the various workstations, where ever required.

### **MAN**

- MAN stands for **Metropolitan Area Network**
- It may be wholly owned and operated by a private company
- This type of network can be expanded in entire city
- It is highly beneficial in case of cabling of television network

### **Merits & Demerits of MAN**

#### **Merits**

- Dual Bus can be used in MAN that helps in two direction communication
- It can cover many blocks of city or entire city.
- It offers 100Km range in approx

#### **Demerits**

- More cabling is required
- Security Issues are complex to handle

### **WAN**

- WAN stands for **Wide Area Network**
- It is useful in case of long distance transmission of data, images.
- It can also be used for long distance videos and audio data transmission from one location to another.
- It offers coverage beyond 100 Km.

### **Merits & Demerits of WAN**

## Advantages

- Covers large geographical area
- Messages or any information can be sent very quickly to the connected network

## Disadvantages

- Need a very strong firewall
- Needs technical experts and supervisors for maintenance

Security is a major concern

## Mcq

Q1. A local area network using wireless technology is termed as:

Options:

- A. WLAN
- B. LAWN
- C. Wireless local area network
- D. All of these

Answer: D

Q2. If a network has to be established in a office, which is a three storey building, which of the network will be best suitable for this?

Options:

- A. LAN
- B. MAN
- C. WAN
- D. CAN

Answer: A

- We learnt about:

#Computer Network

#Classification of Computer Network

#LAN with merits and demerits

#MAN with merits and demerits

#WAN with merits and demerits

 Mayank

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