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Subject :- OCW
Assignment Name :- Lab 1

Q1 → Wired communication are those that use physical cable to transmit data. The most common type of wired communication medium are :-

● twisted pair cable :-
This type of cable consists of two insulated copper wire that are twisted together. It is most common type of cable used for Ethernet networks.

● Coaxial cable :-
This type of cable consists of central copper conductor surrounded by layer of insulation, a braided metal shield, and outer jacket. It is often used in cable TV, etc

● fiber optic cable :-
This type of cable uses light signal to transmit data. It is fastest type of wired communication medium, and is often used for long-distance network and high-bandwidth applications.

Wireless communication medium are those that donot use physical cable to transmit data. Instead, uses electromagnetic waves to send and receive receive data

● Radio waves :-
It is used for variety of wireless communication including AM, FM radio, cell phone, etc.

● Infrared :
It is used for short-range wireless communication such as remote control, etc.

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- Bluetooth.

  It is short range wireless technology that is used to connect devices such as smartphone, laptop, etc.

- Wifi :

  It is technology which uses radio waves to connect devices to internet.

Q2 →

A Personal Area Network (PAN) is computer network for interconnecting electronic devices within individual person's workspace. The range of PAN is typically up to 10 meters. PAN's are typically used to connect devices such as laptops, tablets, printers, etc.

It can be connected to each other using :-

- Wired : USB, firewire, thunderbolt.
- Wireless : Bluetooth, Wifi, etc.

PAN are used for variety of purpose :-

- File Sharing :-

  PAN's can be used to share file between devices, such as transferring a document from laptop to smartphone.

- printing :-

  PAN's can be used to connect printer to a computer or mobile devices, allowing users to print document wirelessly.

- **Entertainment :-**
  PAN's can be used to connect devices for
  entertainment purpose such as streaming video,
  playing multiplayer games.

PAN's are versatile and convenient way to
connect devices and share data. They are used
in wide variety of settings, from homes and
offices to school and hospital.

PAN's are essential part of our modern world ed
people of all ages and background. They make
it possible for us to stay connected and
productive.

Q3 → Pingplotter is network troubleshooting - tool
that helps - identify source of network.
1) select target → input target IP or domain
2) configure Monitoring :- Set monitoring option
   like ping intervals.
3) start test :- Begin monitoring to collect data
4) Analyze trace route :- Examine graphical
   trace routes & ~~nothing~~ hops & white high latency
   or packet loss (%).
5) ~~Identify~~ Check host :- Resolve IP address
   to host for more information.

6) Contact ISP or Network Admin :-
   If problem with ISP, provid ping plotter
   data to request assistance.

7) monitor and confirm :-
   keep monitoring to issue resolution.

for @ www.zomato.com.

IP   Avg   Min   Cur   PL%.
10.163.252.137   148.7   10.7   122.7   8.5
115.247.86.125   163.2   13.2   120.0   2.7

for www.swiggy.com

IP   Avg   Min. Cur   PL%.
10-114.73.122   143.0   19.7   162.2   1.7
185.247.85.129   142.9   34.1   121.1   0.9