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Subject : OCW
Assignment → 4.

Part - I

- Q1 →
- A) LAN (Local Area Network)
 - B) WLAN (Wireless local Area Network)
 - C) TCP (Transmission Control Protocol)
 - d) IPTV (Internet Protocol Television)

Q2 →

- In Application layer, HTTP/S (Hypertext Transfer Protocol), FTP (File Transfer Protocol), TELNET (used for Terminal), SMTP (Simple mail transfer Protocol), when we search this protocols are used.
- Next step connection is established using TCP (Transmission control protocol) and file are transfer securely.
- Next step, HTTP Request is done and then server processing is done, check that on server and ~~that~~ HTTP response is given.
- lastly, connection is closed.
- between this we also used SSL (Secure Socket) to check connectivity of data.

Part - 2

Q1 → c) 2^{18} ; $2^{12} - 2$

Q2 → ~~a) $3m = 2n$~~ c) $18m = 7n$

Q3 → c) 172.16.0.0 - 172.16.31.255

Part 3:-

- Q1. → • Capturing Packets :- After downloading Wireshark, open it. Click on network interface under capture to start capturing packet.
- Colour coding :- Wireshark uses color to help you identify type of traffic. Bright purple is TCP traffic.
 - Filtering Packet :- ~~from~~ there is "filter" present in capture options. You can manually enter capture filter.
 - Inspecting Packet :- you can use Wireshark to inspect suspicious program network traffic, analyze traffic flow on network, troubleshoot network problem.

Q2. → • Capture filter
It is applied before Wireshark start capturing packet. It is used to select only packet that you are ~~interest~~ interested in, which can save you time and disk space.

• Display filter.

A display filter is applied after Wireshark has captured packet. It is used to select only the packet that you want to display in packet list. To filter outgoing packet from a specific system. In short, it is use display to select only outgoing packet.

Q3 → Wireshark can store captured packet in 2 primary format

a) pcap: This is older, libpcap format.

It is simpler format and is well established but not support as many features as other. pcap files are also less compatible.

b) PCAPng :- This is default and is flexible, extensible successor to libpcap format. It support variety of features. Such as packet comment, naming. It is more compatible.