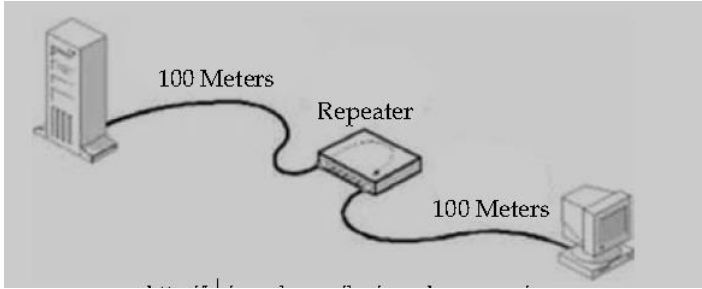
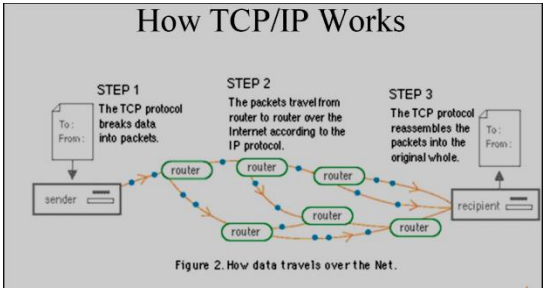


MSD Sanjeevani Public School, Mohan Garden
Subject- Computer Science (with Python)
Class-12th (Non-Med)
Assignment-13 (from ch-10 Computer Network)

Q1	Explain repeater and its working?
Ans	<p>A repeater is an electronic device that receives a signal , amplifies it and then retransmits it on the network so that the signal can cover longer distances. Network repeaters regenerate incoming electrical, wireless or optical signals. An electrical signal in a cable gets weaker with the distance it travels. With physical media like Ethernet or WiFi, data transmissions can only span a limited distance before the quality of the signal degrades. Repeaters attempt to preserve signal integrity by periodically regenerating the signal and extend the distance over which data can safely travel.</p> 
Q2	What do you mean by network protocol or protocol?
Ans	<p>In information technology, a protocol is the special set of rules. Two or more machines on a network follow the network protocols to communicate with each other. A protocol defines how computers identify one another on a network. A protocol is needed every time we want to perform any task on a network. It may be transferring data or taking a printout on a network printer or accessing the central database.</p>
Q3	Explain TCP/IP.
Ans	<p>TCP/IP are the two protocols that are used together and together they form the backbone protocol of the internet. TCP/IP has two major components: TCP and IP.</p> <ol style="list-style-type: none"> 1. The Transmission Control Protocol(TCP) breaks the data into packets that the network can handle efficiently. It manages the assembling of a message or file into smaller packets that are transmitted over the Internet. It verifies all the packets when they arrive at the destination computer and then reassembles them in proper order. 2. The Internet Protocol(IP)handles the address part of each packet so that it reaches to the right destination. It gives distinct address (called IP address) to each data packet. An IP address is a unique identifier for a node . An IP address is a 32 bit binary number Example: 40.179.220.200 
Q4	Define FTP.
Ans	This protocol is designed for transferring files of any type(ASCII or binary)

	from one system to another on the internet. FTP is an application protocol that uses the Internet's TCP/IP protocols. FTP is used to download and upload files by making FTP requests through your web browser.
Q5	Define HTTP.
Ans	HTTP is the protocol that is used for transferring hypertext (i.e. text, graphic, image, sound, video etc.) between two computers and is particularly used on the World Wide Web. It is a TCP/IP based communication protocol and provides a standard for Web browsers and servers to communicate. For example, when you enter a URL in your browser, this actually sends an HTTP command to the Web server directing it to fetch and transmit the requested Web page.
Q6	Explain E-mail protocols?
Ans	<p>1. SMTP stands for Simple Mail Transfer Protocol that allows transmission of email over the Internet. Most email software is designed to use SMTP for communication purposes when sending email. It only works for outgoing messages. So when an email has to be sent, the address of their Internet Service Provider's SMTP server has to be given. The actual mail transfer is done through Message Transfer Agents(MTA). SMTP actually defines the MTA client and the server on the internet. One of the purposes of an SMTP is that it simplifies the communication of email messages between servers.</p> <p>2. Post Office Protocol 3 or POP3 is the method of receiving email which receives and holds email for an individual until they pick it up. Each POP3 mail server has a different address, which is usually provided to an individual. This address must be entered into the email program so that the program can connect effectively with the protocol. Many popular email programs, including Microsoft Outlook, are automatically designed to work with POP3. The individuals receiving POP3 email will have to input their username and password in order to successfully receive email.</p>
Q7	What do you mean by chatting? Explain IRC.
Ans	<p><u>Chatting</u> :A real time informal communication over the Internet is chatting. A chat program is software which is required for chatting over the internet. In order to chat, the user should have an account on a chatting program. A online chat is textual conversation.</p> <p><u>Internet Relay Chat (IRC) protocol</u> IRC protocol is used for chatting. It provides chatting between a group or between two individuals. The IRC client sends and receives messages to and from an IRC server. The IRC server transports the message from one client to another. The IRC server is linked to many other servers to form an IRC network. IRC server identifies every user through a unique nickname.</p>
Q8	Explain VOIP.
Ans	VOIP stands for voice over internet protocol. It enables the transfer of voice using packet switched network rather than using public switched telephone network. By using VOIP software, phone calls can be done using standard internet connection. This method of making phone calls is much cheaper than convectional way.