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Department of _____Engineering

Academic Year : 2020-21	
SUBJECT : **Computer Network and Security**	
CLASS: **TE**	**SEMESTER:** 5th
ASSIGNMENT NO. : **OCW**	**DATE OF SUBMISSION:**
NAME OF STUDENT: **KAUSTUBH SHRIKANT KABRA** ROLL NO. **38**	
Topic: **Computer network and Internet Protocol**	
WEBSITE URL REFERRED: **https://youtu.be/lnU-Zw3NEEQ**	

Summary/Abstract/Review:

What is Computer Networking?

By definition, a computer network is a group of computers that are linked together through a communication channel.
All the computer devices are called **hosts** or **end systems**. Hosts sending requests are called **clients** while hosts receiving requests are called **servers**. End systems are connected together by a network of **communication links** and **packet switches**. Communication links are made up of different types of physical media, including coaxial cable, copper wide, optical fiber, and radio spectrum. Different links can transmit data at different rates, with the **transmission rate** of a link measured in bits/second. When one end system has data to send to another end system, the sending end system segments the data and adds header bytes to each segment. The resulting packages of information, known as **packets**, are then sent through the network to the destination end system, where they are reassembled into the original data. A packet switch takes a packet arriving on one of its incoming communication links and forwards that packet on one of its outgoing communication links. Common packet switches are **routers** and **link-layer switches**.

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Internet Protocols

End systems, packet switches and other pieces of the Internet run **protocols** that control the sending and receiving of information within the Internet. The **Transmission Control Protocol (TCP)** and the **Internet Protocol (IP)** are two of the most important protocols in the Internet. The IP protocol specifies the format of the packets that are sent and received among router and end systems. The Internet's principal protocols are collectively known as **TCP/IP**.

Given the importance of protocols to the Internet, it's important that everyone agrees on what each and every protocol does, so that people can create systems and products that interoperate. Internet standards are developed by the **Internet Engineering Task Force (IETF)** into documents called **requests for comments (RFCs)**. RFCs tend to be quite technical and detailed. These define protocols such as TCP, IP, HTTP, DNS and SMTP. There are currently more than 6,000 RFCs.

Conclusion:

Hence, We have studied basics of **Computer Networks and Internet Protocol.**

Name & Sign of Subject In-charge:	**Marks:**	