

Review questions B

Describe the function of each of the following:

Modem

Router

Hub

Switch

Bridge

TCP

IP

HTTP

SMTP

FTP

Solutions

Modem

A combined device for modulation and demodulation; for example, between the digital data of a computer and the analog signal of a telephone line

Router

A router forwards packets based on address. Usually, routers use the IP address to forward packets, which allows the network to go across different protocols.

Hub

Hubs send data packets to all connected devices/computers on the network. It simply connects computers on a network together.

Switch

Switches contain many ports to connect different network segments. Contrary to hubs, switches send the data they receive only to specific ports.

Bridge

In telecommunication networks, a bridge is a product that connects a local area network (LAN) to another LAN that uses the same protocol.

TCP

TCP breaks down the data communicated between applications into packets so that IP can send them to another computer. TCP reassembles the packets once delivered by IP.

IP

IP is the communication that takes place between computers. It is IP that actually sends packets between computers and routes them to their correct destination.

HTTP

Short for Hyper Text Transfer Protocol, HTTP (not to be confused with HTML) is the Internet protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions web servers and browsers should take in response to various commands.

SMTP

An Internet protocol used for sending e-mail messages between servers. Most email systems that use the Internet use SMTP to send messages from one server to another.

FTP

File Transfer Protocol (FTP) is an Internet protocol for exchanging files over the Internet. FTP works similarly to the other Internet protocols such as HTTP and SMTP.