University of Technology Bahrain

College of Computer Studies

Case Study 1

TOPIC	Solve the Case Study :
ASSIGNMENT DIRECTION & REQUIREMENT/S *(Identify the ILOs to be assessed at the end of each requirement. Include the rubric or marking scheme for each item/requirement.)*	Web server is a special computer system running on HTTP through web pages. The web page is a medium to carry data from one computer system to another. The working of the webserver starts from the client or user. The client sends their request through the web browser to the webserver. Web server takes this request, processes it and then sends back processed data to the client. The server gathers all of our web page information and sends it to the user, which we see on our computer system in the form of a web page. When the client sends a request for processing to the web server, a domain name and IP address are important to the webserver. The domain name and IP address are used to identify the user on a large network. 1. Web servers are: 1. IP addresses 2. Computer systems 3. Webpages of a site 4. A medium to carry data from one computer to another 2. What does the webserver need to send back information to the user? 1. Home address 2. Domain name 3. IP address 4. Both b and c 3. What is the full form of HTTP? 1. Hypertext Transfer Protocol 2. Hypertext Transfer Procedure 3. Hyperlink Transfer Protocol 4. Hyperlink Transfer Procedure 4. The _____ translates internet domain and host names to IP address 1. Domain name system 2. Routing information protocol 3. Google 4. Network time protocol

5. Computer that requests the resources or data from other computer is called as ____ computer
    1. Server
    2. Client
    3. None of the above
    4. a and b

6. DNS stands for:
    1. Domain Name Security
    2. Domain Number System
    3. Document Name System
    4. Domain Name System

7. What is the format of IP address?
    1. 34 bit
    2. 32 bit
    3. 16 bit
    4. 64 bit

A. In mid 80's another federal agency, the NSF created a new high capacity network called NSFnet, which was more capable than ARPANET. The only drawback of NSFnet was that it allowed only academic research on its network and not any kind of private business on it. Now, several private organisations and people started working to build their own networks, named private networks, which were later (in 1990's) connected with ARPANET and NSFnet to form the Internet. The Internet really became popular in 1990's after the development of World Wide Web.

1. What does NSFnet stand for?
    1. National Senior Foundation Network
    2. National Science Framework Network
    3. National Science Foundation Network
    4. National Science Formation Network

2. What does ARPANET stand for?
    1. Advanced Research Premium Agency NETwork
    2. Advanced Research Projects Agency NETwork
    3. Advanced Review Projects Agency NETwork
    4. Advanced Research Protection Agency NETwork

3. What is internet?
    1. A single network
    2. A vast collection of different networks
    3. Interconnection of local area networks
    4. Interconnection of wide area networks

4. To join the internet, the computer has to be connected to a _____
    1. Internet architecture board
    2. Internet society
    3. Internet service provider
    4. Different computer

5. Internet access by transmitting digital data over the wires of a local telephone network is provided by:
    1. Leased line
    2. Digital subscriber line
    3. Digital signal line
    4. Digital leased line

6. A piece of icon or image on a web page associated with another webpage is called _____
    1. URL
    2. Hyperlink
    3. Plugin
    4. Extension

    Ans. 2

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TCP/IP, or the Transmission Control Protocol/Internet Protocol, is a suite of communication protocols used to interconnect network devices on the internet. TCP/IP can also be used as a communications protocol in a private computer network (an intranet or an extranet).

TCP defines how applications can create channels of communication across a network. It also manages how a message is assembled into smaller packets before they are then transmitted over the internet and reassembled in the right order at the destination address.

IP defines how to address and route each packet to make sure it reaches the right destination. Each gateway computer on the network checks this IP address to determine where to forward the message. TCP/IP uses the client-server model of communication in which a user or machine (a client) is provided a service (like sending a webpage) by another computer (a server) in the network. Collectively, the TCP/IP suite of protocols is classified as stateless, which means each client request is considered new because it is unrelated to previous requests. Being stateless frees up network paths so they can be used continuously.

1. Which of the following protocols is used in the internet?
    1. HTTP
    2. DHCP
    3. DNS
    4. All of the above

2. Which one of the following is not an application layer protocol used in internet?
    1. Remote procedure call
    2. Internet relay chat
    3. Resource reservation protocol
    4. Local procedure call
3. Which protocol assigns IP address to the client connected to the internet?
    1. DHCP
    2. IP
    3. RPC
    4. RSVP
4. Several protocols for upper layers in Bluetooth use:
    1. UDP
    2. HSP
    3. ITC
    4. L2CAP

5. Internet protocols are a set of rules to govern:
    1. communication between computers on a network
    2. standard
    3. metropolitan communication
    4. bandwidth
6. Checksum is used on internet by several protocols although not at the _____
    1. sesson layer
    2. transport layer
    3. network layer
    4. data link layer
7. Network layer at source is responsible for creating a packet from data coming from another _____
    1. station
    2. link
    3. node
    4. protocol