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PRACTICAL EXAM 2022

ODD NUMBER MARKS

- 1. Start capturing packets http packets from the following url: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file1.html and answer the following questions.
 - 1. What version of HTTP is the server running 1.0 or 1.1?
 - 2. What languages (if any) does your browser indicate that it can accept to the server? In the captured session, what other information (if any) does the browser provide the server with regarding the user/browser?
 - 3. What is the IP address of your computer and of the gaia.cs.umass.edu server?
 - 4. What is the status code returned from the server to your browser?
 - 5. When was the HTML file that you are retrieving last modified at the server?
- 2. Write a program using client server socket programming: Client needs to authenticate itself by entering a server defined string as a password (like OTP) and then to say Hi to server. Server replies with a Hello.

EVEN NUMBER MARKS

- 1. Perform the following instructions to capture the DHCP packets and answer 5 the questions given below.
 - Start the command prompt and execute command: ipconfig /release in C:\windows\system32
 - Start Wireshark Packet Sniffer Tool
 - Go back to command prompt and execute command: ipconfig /renew
 - After termination of the above command again execute the command: ipconfig /renew
 - After termination of the above command: ipconfig /release
 - Again execute the command: ipconfig /renew
 - Stop packet capturing in Wireshark Packet Sniffer tool.
 - Now, to filter the DHCP packets in Wireshark Sniffer Tool filter enter keyword "bootp"

Answer the following questions:

1. Which protocol is used by the DHCP at the transport layer?

- 2. What is the host address at the link layer (Ethernet)?
- 3. What is the difference between the discover and request packet of the DHCP?
- 4. What is the DHCP server's IP address for your machine?
- 5. How many bytes of content are being returned to your browser?
- 2. Create a multi client server socket programming, the server will broadcast 10 current temperature to all clients.