

NAME: \_\_\_\_\_ Roll: 

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1. Below follows the Hex-bytes of a packet received with Ethernet Adapter of computer. Analyse the packet:

```
ff ff ff ff ff ff e0 91 f5 98 1b 85 08 06 00 01
08 00 06 04 00 01 e0 91 f5 98 1b 85 ac 11 ac 9f
00 00 00 00 00 00 ac 11 ac b7
```

- a. Extract the Ethernet Header and find the source and target hardware addresses.
- b. Does either of these addresses have a speciality in significance
- c. What is the upper layer (Network Layer) protocol?
- d. What is the size of the Network Layer protocol?
- e. What does it do? Explain properly

2. Given here is the hex-stream of another packet received with the Ethernet Adapter of the same computer. Analyse the packet.

```
e0 91 f5 98 1b 85 e0 91 f5 98 1c 02 08 06 00 01
08 00 06 04 00 02 e0 91 f5 98 1c 02 ac 11 ac b7
e0 91 f5 98 1b 85 ac 11 ac 9f 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00
```

- a. Extract the Ethernet Header and find the source and target Hardware addresses
- b. What is the upper layer protocol?
- c. What is the size of the upper layer protocol?
- d. What does it do? Explain properly

3. Received at the Ethernet Adapter is the following Hex chunk of bytes:

```
e0 91 f5 98 1b 85 e0 91 f5 98 1c 02 08 00 45 00
00 34 07 71 40 00 80 06 41 d9 ac 11 ac b7 ac 11
ac 9f 27 10 c0 9f be 01 16 79 63 bf 9d 8c 80 12
20 00 e0 0f 00 00 02 04 05 b4 01 03 03 08 01 01
04 02
```

- a. Separate the Ethernet packet, the Network Layer packet and the transport layer packet
- b. Find out the IPv4 addresses of the participant hosts (sender & receiver)
- c. What is the size of the network layer header?
- d. Which protocol operates here at the transport layer?
- e. What are the source and destination ports?
- f. Analyse the Transport layer packet. How many bytes of data does it carry? Does this packet have some significance?
- g. Would you prefer to use this Transport layer protocol to set up your own media streaming server featuring, let us say, for LIVE broadcasting your College Fest?