

Question 03

Part 01:

i.

IP layer: Header Checksum: 0xb162 [validation disabled]

UDP layer: Checksum: 0x6404 [unverified]

ii. It is a UDP packet. Hence, no TCP segments present.

iii. Frame Length: 245 bytes (1960 bits)

iv.

Source Port: 53

Destination IP: 192.168.100.99

Part 02:

A.

OSI Layers:

1. Application Layer
2. Presentation Layer
3. Session Layer
4. Transport Layer
5. Network Layer
6. Data-Link Layer
7. Physical Layer

B.

Default Subnet Masks

Class A: 255.0.0.0

Class B: 255.255.0.0

Class C: 255.255.255.0

C.

IP Address: 192.168.10.1, Subnet Mask: 255.255.255.0

Network Address: 192.168.10.x

Broadcast Address: 192.168.10.255

Host Address: x.x.x.1

IP Address: 10.0.0.1, Subnet Mask: 255.0.0.0

Network Address: 10.x.x.x

Broadcast Address: 10.255.255.255

Host Address: x.0.0.1

IP Address: 172.72.10.0, Subnet Mask: 255.255.0.0

Network Address: 172.72.x.x

Broadcast Address: 172.72.255.255

Host Address: x.x.10.0