

**Q.1:**

Frame = 1478 bytes, payload = 1424 bytes, so the total of the fields is 54 bytes.

**Q2:**

Src: 80, Dst: 56658

**Q.3:**

Reserved: Not set

Nonce: Not set

Congestion Window Reduced (CWR): Not set

ECN-Echo: Not set

Urgent: Not set

Acknowledgement: Not set

Push: Not set

Reset: Not set

Syn: Set

Fin: Not set

**Q.4:**

SYN - Source: Port 56658, IP 192.168.122.103,

Dest: Port 80, IP 136.142.35.172

Syn: Set, all other fields: Not set

SYN, ACK - Source: Port 80, IP 136.142.35.172,

Dest: Port 56658, IP 192.168.122.103

Syn, Ack: Set, all other fields: Not set

ACK - Source: Port 56658, IP 192.168.122.103,

Dest: Port 80, IP 136.142.35.172

ACK: Set, all other fields: Not set

**Q.5:**

58 bytes

**Q.6:**

$(54+74)/2 = 64$  bytes

**Q.7:**

1

**Q.8:**

They are ACK messages

**Q.9:**

119 bytes, the payload of the HTTP GET message.

**Q.10:**

There are PSH, ACK messages, where the server acknowledges receipt of some data and transmits more data.