1) Traceroute send 24 normal ICMP echo (ping) requests. Also there are 10 ttl exceeded ICMP echo (ping) requests.
TTL fields of packets increments one by one.

2)

Numbers	Source IP Addresses
181	144.122.208.1
183	144.122.2.1
185	213.194.75.25
186	193.140.85.137
188	31.145.74.162
189	46.234.28.57
191	195.2.23.129
199	195.2.27.149
207	195.2.16.1
215	144.122.1.21

The IP addresses are the same with the output of the traceroute command except the last one.

3)

Traceroute sends a UDP packet to the destination with a TTL value. Then, the routers which are between source and destination decrements the TTL value of the UDP packets one by one. After the TTL value became zero, the routers send "Time to live exceeded in transit" messages to the source. Finally, the router drops this packet. We can learn the IP address of the router by using this message of the router sent. For the first router, the TTL value becomes 1. For the second one, it becomes 2, Then, 3 and 4. It goes on until the number of router.

The output can be different, even if the network and the location is the same. For example, The links between the router and the source. To solve this we can send the packets from different routers, but the output will be changed.

4)
IP header length of the DNS query response with type A record for hbostann.com is 20 bytes.
Total packet length of the DNS query response with type A record for hbostann.com is 85.

5)
The value of Protocol field in IP header for UDP communication is 17
The value of Protocol field in IP header for ICMP communication is 1.

6)
Yes. Each fragment has maximum transmission unit as 1500 bytes in size comprising 20 byte IP header and 1480 bytes of data. So, for 5000 bytes we need to use four fragment. For the first three fragment, the datagram value is 1480 bytes and the last one is 560 bytes.