A.1

Number of client IP = 2.
IP address
192.168.56.32
192.168.56.64
Why because, clients are the one who initiate the request/communication. As we can see these two IP's make connection first. That is why they are not servers.

A.2

Number of servers: 1
IP address with port
192.168.56.1:9999
Why because, server is getting all the requesting and sending back reply.

A.3

Data transferred between source and destination is as following (except loopbacks)

Client/server (source)	Client/server (destination)	Data sent (msg)
192.168.56.32	192.168.56.1	test
192.168.56.1	192.168.56.32	test
192.168.56.32	192.168.56.1	blahblah
192.168.56.1	192.168.56.32	blahblah
192.168.56.64	192.168.56.1	temptemptemp
192.168.56.1	192.168.56.64	temptemptemp
192.168.56.64	192.168.56.1	blah1234
192.168.56.1	192.168.56.64	blah1234
192.168.56.32	192.168.56.1	dgfdaskjfhas
192.168.56.1	192.168.56.32	dgfdaskjfhas
192.168.56.64	192.168.56.1	adsfasdfhakdfa
192.168.56.1	192.168.56.64	adsfasdfhakdfa
192.168.56.64	192.168.56.1	bye
192.168.56.1	192.168.56.64	bye
192.168.56.32	192.168.56.1	bye
192.168.56.1	192.168.56.32	bye

A.4

Packets are captured on server.
We can see the details of the loop-back from the packet that is “Destination port: distinct (9999)” .

9999 is the port server is listening from.

A.5

As per the solution from second question we can see that the server sends the same reply back to the sender. It is most likely to be for the testing purpose of connectivity between client and server.