Part1.

The UDP throughput initially increases with the increase in bandwidth but becomes constant as the bandwidth reaches nearly 1mbps.

Part 2.

1. Effect of S1-S2 link bandwidth on TCP and UDP throughput

From the graph, we see the effect of changing the S1-S2 link bandwidth on the TCP and UDP throughput.

On increasing the S1-S2 link bandwidth the we allow more amount of data to pass through and thus, the throughput increases. Thus TCP and UDP throughput is directly proportional to the link bandwidth of S1-S2.

1. Effect of S1-S2 link delay on TCP and UDP throughput

From the graph we see that the throughput remains constant with very slight decrease even after changing the delay.The decrese is very insignificant.

The amount of data passed does not get changed much after changing the delay, hence the throughput remains constant.

Part 3.

On increasing the loss, the throughput decreases eventually in both TCP and UDP.

This is because, on increasing the loss percentage more number of packets get lost and are eventually not transferred to the target. This lesser number of packets reaching the target decreases throughput.Thus delay is inversely proportional to throughput.