**INDIAN INSTITUTE OF TECHNOLOGY ROPAR**

**CSL304: Computer Networks Lab 1**

**The aim of this assignment is to make you familiar with basic networking commands.**

Q1. Use at least four different commands to find the Public IP address of your machine.

Q2. Use ping localhost command and find out the following :

i) the average RTT (round trip time).

ii) the % packet loss.

iii) size of packet that is sent to localhost.

iv) size of packet that is received by your machine.

v) 208.67.222.222 (Explore this ip address and compare & explain its RTT with RTT returned by

iitrpr.ac.in)

Q3. Compute the same statistics as in Q2, using ping command but with explicit specification of the following :

i) the number of packets.

ii) Packet size.

Q4. Use the dig www.iitrpr.ac.in command and find out.

i) The ip address of iitrpr.ac.in.

ii) The ip addresses of local DNS servers of IIT Ropar.

Q5. Find the number of hops in between your machine and your friend's machine.

Q6. Find out the currently configured network interfaces over your machine and display the

kernel interface table.

**Q7, Q8, and Q9 are related to wireshark and wireshark files are given in the classroom.**

Q7. List 3 different protocols that appear in the protocol column in the unfiltered packet listing

window.

Q8. How long did it take from when the HTTP GET message was sent until the HTTP OK

a reply was received? (By default, the value of the Time column in the packet-listing window

is the amount of time, in seconds, since Wireshark tracing began. To display the Time field

in time-of-day format, select the Wireshark View pull down menu, then select Time Display

Format, then select Time-of-day.)

Q9. How many TCP data transmission is there in the given file.