National Institute of Technology, Rourkela

DCCN Lab (CS3072)

19th January - 2024

Evaluation Scheme:-

Day to Day Evaluation: 60 Marks

Viva: 20 Marks Quiz: 20 Marks

Instructions for the Lab

- A. If a student is absent on the day of evaluation, will be awarded ZERO for that evaluation.
- B. Turn off your systems before leaving lab. Do not use mobile phone during lab hours.

<u>Lab 2</u>

Q1: Answer the following questions for captured file http.pcap (HTTP Protocol)

- 1. List 3 different protocols that appear in the protocol column in the unfiltered packet-listing window in step 7 above.
- 2. How long did it take from when the HTTP GET message was sent until the HTTP OK 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 *DisplayFormat*, then select *Time-of-day*.)
- 3. What is the Internet address of iitd.ac.in? What is the Internet address of your computer?
- 4. Print the two HTTP messages (GET and OK) referred to in question 2 above. To do so, select *Print* from the Wireshark *File*command menu, and select the "*SelectedPacketOnly*" and "*Printasdisplayed*" radial buttons, and then click OK.

- 5. Find the packet number that includes HTTP GET message for a file IITD-IRD-122-2017.pdf. Also find the length of the file in bytes and time when file is downloaded successfully.
- Q2: Open the http.pcap file given in study material in Wireshark. Use File->Export Packet Dissections to save the data in csv file format. Write a C/C++/Java/Python code to read the data in csv file and print
 - a. source IP addresses and destination IP addresses
 - b. source port numbers and destination port numbers
 - c. http request and response messages.