(Note: Total 25 marks for this lab assignment which includes 20 marks + 3 marks for your presentation + 2 marks for your report)

For each of the following steps, describe your results, give the syntax of the command you used, and, where appropriate, the output produced. Include screen captures as needed in your output. Be sure to label your results carefully and organize your results in the order of steps as given here and answer each question in your report.

- 1. Download the BitTorrent software from the given link https://www.bittorrent.com/.
- 2. Then download any one Torrent file and then save it on your device.
- 3. Open Wireshark in the background by choosing the appropriate interface.
- 4. Then open your torrent file and start the download at least 20%. Stop the capture and document the answers to the following questions:
 - a. Give a detailed study about the working of BitTorrent in your downloading scenario.
 - b. Working of BitTorrent.
 - c. Protocol Level Analysis
 - d. Tracker's status.
 - e. DHT status
 - f. Identify other peers involved in the communication
 - g. Try to identify the name of the file downloded
- 5. Try to export the 20% of data you have captured as traffic in Wireshark while downloading files in Torrent.
- 6. After the Download completes and when it starts seeding, open the Wireshark and analyze the information being transferred in that traffic. Document the difference in Network traffic.