

## QE for CS546 Wireless Mobile Internet (each 20 points)

1. Define each (with max five lines).

- PSNR
- IEEE 802.11p
- Cognitive Radio
- Layer 2 roaming delay for handoff

2.  $WCETT = (1 - \alpha) * \sum_{i=1}^L ETT_i + \alpha * \max_{1 \leq j \leq k} T_j$  where  $ETT_i$  is the expected transmission time of link  $i$  in a path of length  $L$  and  $T_j$  is the sum of the transmission times on a particular channel  $j$ .

The authors insisted that WCETT measures intraflow interference. Is it true? Why or why not?

3. Maintaining stable routes provided by AODV over WiFi in Wireless Mesh Networks or Mobile Ad Hoc Networks is very difficult. Why? Explain it with a real scenario.

4. What could be the future features of WiFi?

5. Why the VoIP capacity per Access Point is around 10 % of its max data rate?