**CS 5197/6097 Wireless and Mobile Networking**

**Homework No. 11 dated Wednesday November 22, 2017**

**P17.2.** What will be the propagation delay between a satellite and an earth-based mobile station if the satellite is located at a distance of 850 km and if its inclination angle is ?

**P17.4.** What should be the velocity of the satellite if it orbits around earth at a distance of 1000 km and weighs 2000 kg?

**P17.7.** What is the information content if two-way diversity is used in a satellite system 10% of time by 50% of the traffic and the rest of the 50% traffic only 5% of time?