Manarat International University (MIU)

Department of Computer Science and Engineering
Mid-term Examination (Spring 2019)
Cellular Mobile and Satellite Communication (CSE-472)

Full Marks: 20   Time: 1.5 Hour

Answer any 5 (Five) questions. All questions are of equal value.

1 a) Write down the differences between analog and digital communications ?   4

   b) What is *Shannon's sampling* theorem *?*

2 a) Why do we need satellites?   2 + 2

   b) Define Retrograde Orbit, Descending Node.

2 a) Define cell frequency. Explain the concepts of frequency reusing in cellular network.   2 + 2

   b) Why hexagon cell shape is highly recommended for cellular communication?

4 a) Explain different types of multiple access techniques in cellular communications.   4

   b) State Kepler's second law of satellite.

5 Explain the architecture GSM network in brief.   4

6 Elaborate the following acronyms   0.5x8=4

   IMEI, PSTN, MTSO, ISDN, EIR, MSU, SIM, BTS