

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(ECE)EL-III (2016 Batch) (Sem.-3)

WIRELESS COMMUNICATION AND NETWORKS

Subject Code : MTEC-301D

Paper ID : [74775]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

Q1. State and explain in brief about NLOS multipath fading models.

Q2. a) Discuss in detail about MIMO-MU systems.

b) Discuss in brief about the concept of capacity of frequency selective fading for time variant channels.

Q3. a) Explain briefly about hybrid techniques in multi user systems.

b) Briefly describe COST 231 extension of Hata model.

Q4. Explain in brief the concept of parallel decomposition of the MIMO channel in communication.

Q5. a) Explain Maximum-ratio Combining receiver diversity technique in detail.

b) Compare STBC and STTC in detail.

Q6. Discuss flat fading channel model in detail. Also discuss the significance of channel state information in channel model.

Q7. a) Discuss in brief about FDMA and TDMA multiple access techniques.

b) Explain the concept of link power budget analysis with suitable example.

Q8. a) Discuss MIMO channel capacity and the factors on which MIMO channel capacity depends.

b) Write a brief note on uplink downlink channel capacity.