

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

M.Code : 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. Describe briefly about the narrowband MIMO model. Also discuss in detail about the parallel decomposition of the MIMO channel.
- Q2. (a) Explain in brief the comparison of STBC and STTC.
(b) Write a brief note on MIMO-MU systems.
- Q3. (a) Explain about the MIMO diversity gain and uplink downlink channel capacity.
(b) Describe the concept of channel known at transmitter and channel unknown at the transmitter.
- Q4. List and explain in brief about the NLOS multipath fading models.
- Q5. (a) Write a brief note on SDMA multiple access technique.
(b) Discuss in detail about Selection Combining receiver diversity technique.
- Q6. Discuss in detail about the spacial multiplexing and BLAST architecture.
- Q7. (a) Discuss in detail about composite fading - shadowing distributions.
(b) Discuss the role of CSMA protocol? Also explain different variants of CSMA protocol.
- Q8. (a) Explain in detail about link power budget analysis with suitable example.
(b) Compare Rayleigh and Rician fading models.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.