

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Total No. of Pages : 01

Total No. of Questions : 8

**M.Tech.(CSE Engg.)E-II (2018 Batch) (Sem.-1)**  
**ADVANCED WIRELESS AND MOBILE NETWORKS**

Subject Code : MTCS-110-18

Paper ID : [75160]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTIONS TO CANDIDATES :**

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

1. What is multiplexing? Explain different types of multiplexing. (12)
2. Compare SDMA, TDMA, FDMA and CDMA. (12)
3. Explain the following : (2×6=12)
  - a. Functional Architecture of GSM.
  - b. Handover in cellular systems.
4. What are advantages and problems of forwarding mechanisms in Bluetooth networks regarding security, power saving, and network stability? (12)
5. With a focus on security, what are the problems of WLANs? What level of security can WLANs provide? (12)
6. Name the main differences between multi-hop ad-hoc networks and other networks. What advantages do these ad-hoc networks offer? (12)
7. Write short notes on the following : (3×4=12)
  - a. Piconet
  - b. IEEE 802.11i
  - c. Fading effects in indoor and outdoor WLANs
8. What are the main problems of signal propagation? Why do radio waves not always follow a straight line? Why is reflection both useful and harmful? (12)