

CC61

M. Tech. EXAMINATION, 2021

(Third Semester)

(B Scheme) (Re-appear)

(ECE)

MTEC601B

ADVANCED WIRELESS COMMUNICATION SYSTEM

Time : 2½ Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Four* questions in all. All questions carry equal marks.

1. (a) Explain with the help of timing diagram. How a call to a mobile user initiated by a landline subscriber is established ?
(b) Give comparison of mobile communication systems.
2. (a) What is Bluetooth ? Explain its architecture.
(b) What are the requirements of wireless LAN ?
3. (a) Explain in detail the basic propagation mechanisms that impact propagation in a mobile communication system.
(b) Classify the space diversity reception methods.

4. (a) Discuss the handoff strategies to prioritize handoff requests.
(b) Show that frequency reuse factor for a cellular system is given by k/S , where k is average number of channels per cell and S is total number of channels available to cellular service provider.
5. (a) Explain main features of IS-95 CDMA.
(b) Explain main control channels in GSM system.
6. (a) Discuss, how space division multiple access (SDMA) controls the radiated energy for each user in space.
(b) Discuss multiuser interference in reverse link and forward link.
7. (a) What are the objectives of PCS/PCN ? Compare packet and circuit switching for PCN.
(b) Explain various traffic routing methods used in wireless networks.
8. (a) Discuss working of advanced intelligent networks.
(b) Discuss main types of services offered by SS7 network.