

M.E. (EXTC) CBGS Sem II

Mobile & Wireless Communication

QP Code : 2760

19/5/15

(3 Hours)

[Total Marks : 80

- N.B. :
- (1) Question No.1 is compulsory.
 - (2) Attempt any four of remaining six questions.
 - (3) Assume suitable data wherever necessary.

1. (a) Discuss the significance of hand off procedure in CDMA (IS-95). 5
(b) What are the major functions of the RNC in UTRAN architecture? 5
(c) What is the fundamental difference between Wi-Fi and Bluetooth? 5
(d) Discuss power control in WCDMA and CDMA2000. 5
 2. (a) How does cell sectoring improves S/I ratio in cellular system? Derive the expression for S/I ratio in a worst case scenario with 60° and 120° sectorization. 10
(b) Discuss IMT-2000 in detail. 10
 3. (a) With a neat diagram, explain working principle of adaptive equalizer in detail. 10
(b) Explain forward and reverse channels of IS-95 in detail. 10
 4. (a) Compare Hiper LAN 2 with IEEE 802.11 a/b. Highlight advantages and disadvantages of Hiper LAN technology. 10
(b) Explain intelligent cell concept and its application. 10
 5. (a) Describe the various criteria that decide placement of cell-site antennas and mobile antennas. 10
(b) Compare various WMAN standards. 10
 6. Write short notes on (any four):- 20
 - (a) Wireless sensor network.
 - (b) Diversity techniques.
 - (c) Mobile IP and Mobility management.
 - (d) Rake receivers.
 - (e) RFID Technology.
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