

Total No. of Questions : 10] [Total No. of Printed Pages : 2

Roll No.

EC-801

B. E. (Eighth Semester) EXAMINATION, June, 2012

(Electronics & Communication Engg. Branch)

ADVANCE COMMUNICATION SYSTEM

(EC-801)

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Attempt *one* question from each Unit. All questions carry equal marks.

Unit-I

1. (a) Discuss the utility of a channel coding. How does it affect the Bandwidth efficiency of the channel ?
(b) Explain frequency domain coding of speech.

Or

2. (a) Explain Trellis coded modulation.
(b) Explain the working of linear predictive coders.

Unit-II

3. (a) Explain the principle of working of OFDM.
(b) Discuss the principle of operation of smart antennas.

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Or

4. (a) Explain what is multicarrier code division multiple access.
- (b) What is adaptive modulation and how does it affect the capacity ?

Unit - III

5. (a) Discuss about the types of GSM channel.
- (b) Discuss about the frequency and channel specifications of CDMA IS-95 standards.

Or

6. (a) With the help of a block diagram explain reverse CDMA channel.
- (b) How is the connection established and handover done in GSM system ?

Unit - IV

7. (a) How is speech coding done in WCDMA ?
- (b) Discuss about the intermodulation technique.

Or

8. (a) What is time delay spread in cellular system ?
- (b) Discuss about the angle spread with antenna height and also discuss its applications.

Unit - V

9. (a) How is multiuser detection done in CDMA ?
- (b) Compare link capacities versus call drops between GSM and CDMA.

Or

10. Write short notes on the following :
 - (a) Wavelet representation
 - (b) WLL system