EC - 7011

B.E. VII Semester

Examination, December 2013

Wireless Communication

Time : Three Hours

Maximum Marks : 70

Note: 1) All questions carry equal marks.
2) Attempt one question from each unit.

UNIT-I

1. Compute the transmitted power of a wireless noise limited system using link budget analysis.

OR

2. a) Discuss about the spectrum limitations for a wireless communication.
   b) Analyse the relationship between cell radius and reuse distance for an Interference limited systems.

UNIT-II

3. a) Determine the expression of received signal for time invariant propagation along two paths.
   b) Characterize a deterministic linear time variant system.

OR

4. a) Discuss temporal dependence of fading.
   b) Discuss WSSUS model for characterizing the channel.

UNIT-III

5. a) Discuss briefly about different narrow band models.
   b) What are the requirements of underspread channel? Explain.

OR

6. a) Explain briefly about deterministic channel modeling methods.
   b) How is the time domain measurements done over wireless channels.

UNIT-IV

7. a) Explain Binary Phase shift keying modulation used in wireless communication.
   b) Discuss the methods for the computation of error probability.

OR

8. a) Explain offset Quadrature-Phase shift keying modulation.
   b) Discuss the error probability in flat-fading channels.

UNIT-V

9. a) Explain the selective diversity method for combining the signals.
   b) Discuss the working of zero-forcing equalizer.

OR

10. a) Explain the combining diversity method for combining the signals.
    b) Explain the principle working of decision feedback equalizers.