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**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.

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**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.

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