

End Semester Examinations - 2015-16 Even Semester - May 2016

14EC2044 Fundamentals of Wireless Communication

Set B

Time : 3 hrs
Total Marks: 100

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1. a.Explain how Wireless Communication were spread in pre-industrial age. (14)
b. How does Wireless LAN support High speed Data transmission within a small region (6)
- OR**
2. a) Discuss on Simplified Path loss Model (6)
b) Explain how Power Delay profile is associated with average power in a given multipath delay? (14)
3. a) Explain in detail about Wireless Vision which has an exponential growth in Communication (14)
b) How adjacent channel interference are reduced in cellular system? (6)
- OR**
4. a) With a neat diagram explain the Cellular telephone system in detail (10)
b) How does Electromagnetic waves propagate through environment in which reflection occurs? (10)
5. a) Explain in detail about the methods for Spectrum Allocation in Wireless Spectrum (10)
b) Find the average fade duration for threshold levels $\rho=0.01, \rho=0.1$ and $\rho=1$, when the Doppler frequency is 200Hz. (10)
- OR**
6. a) Explain the level crossing rate with suitable waveform. (14)
b) Brief on Narrow Band Fading (6)
7. a) Discuss Third Generation (3G) Cellular system based on Wideband CDMA Standard (14)
b) What is Power Spectral Density? (6)
- OR**
8. a) Discuss the function Wideband Fading with Multipath Resolution (14)
b) What is meant by Coherence Time? Explain with an example (6)
9. a) Briefly discuss about Capacity of Frequency Selective Fading Channels with a neat diagram

(10)

b) Write short notes on Zigbee and Bluetooth

(10)

Wishing you All the Best
