2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

IEEE 802.11 layer 1 Wireless LAN security IEEE 802.15.4 pico nets

Wireless PAN

USN

Seventh Semester B.E. Degree Examination, June/July 2011

Wireless Communication

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

Describe the applications of wireless networks. Describe the applications of wireless networks. Compare UMTS 3G cellular system and CDMA 2000 3G cellular system. What is meant by harmonization in the context of 3G cellular telephone systems? What is the relationship between cluster size and frequency reuse distance? Give the different allowable cluster sizes in a cellular system. For a particular radio transmission technology, a minimum S/I ratio of 15 dB is needed for operation. What is the minimum cluster size? Describe the techniques for expanding the capacity in cellular services. Describe the major subsystems of GSM wireless networks. Explain GSM channel concept. PART - B A Explain the GSM network element identities. Describe GSM system operations. Explain the basic difference between inter BSC and inter MSC handover. Mith a neat block diagram, explain the generation of CDMA synchronization channel signal. Explain the following: i) Handoff in CDMA ii) Power control in CDMA (10 Marks) Describe the theory behind the use of diversity in wireless networks. Explain any two diversity techniques used in wireless applications. Differentiate between FHSS and DSSS. If an OFDM system transmits 32 kbps over each carrier and uses 16 carriers, what is the overall data rate? (04 Marks)					
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