

IV / II ECE ~~SLATE~~

R09

Code No: 09A80409

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech IV Year II Semester Examinations, April - 2014

WIRELESS COMMUNICATION AND NETWORKS

(Electronics and Communication Engineering)

Time: 3 Hours

Max. Marks: 75

**Answer any Five Questions
All Questions Carry Equal Marks**

- 1.a) Explain the cordless telephone systems.
- b) Explain the mobile radio system.
- 2.a) Explain the importance of Bluetooth technology and how it plays a major role in today's mobile systems.
- b) Explain UMTS in detail.
- 3.a) What is frequency reuse? Explain its importance with an example.
- b) Discuss the channel assignments and handoff strategies employed in the design of cellular mobile system.
- 4.a) Differentiate TDMA and FDMA.
- b) Explain different protocols in packet radio.
- 5.a) Discuss the limitations in wireless networking.
- b) Explain the WAP architecture.
- 6.a) Explain the forward and reverse traffic channel of IS-95 CDMA system.
- b) Explain the quadrature spreading in CDMA.
- 7.a) Explain the physical layer specifications of 802.11 using infrared.
- b) Explain about MAC sub layer.
- 8.a) Explain OFDM in detail.
- b) Explain the basic principle of orthogonality and compare single and multi channel systems.
