

Reg. No:

--	--	--	--	--	--	--	--	--	--

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**M.Tech I Year II Semester (R16) Regular Examinations May/June 2017****WIRELESS COMMUNICATIONS**

(Digital Electronics & Communication Systems)

(For Students admitted in 2016 only)

Time: **3 hours**Max. Marks: **60**(Answer all Five Units **5 X 12 =60** Marks)**UNIT-I**

- 1 Give the details about the following types of 2G and 2.5G mobile communications in detail.
- a. GSM 7M
- b. TDMA. 5M

OR

- 2 a. Explain Bluetooth Technology. 6M
- b. Discuss the paging system in detail.. 6M

UNIT-II

- 3 a. Explain the free space propagation model. 5M
- b. Explain three different propagation mechanisms 7M

OR

- 4 a. Describe the statistical models of radio propagation. 6M
- b. Design the simulation methods of these models. 6M

UNIT-III

- 5 Derive the expression for Maximal Ratio Combining improvement 12M

OR

- 6 a. Compare FDMA & TDMA Techniques. 6M
- b. Explain the terms: i) Handover Process and ii) Co-channel Interference 6M

UNIT-IV

- 7 What is pseudo random (PN) sequence and explain how it is used in wireless communication.. 12M

OR

- 8 What is RAKE receiver? Explain it with the help of neat diagram in detail. 12M

UNIT-V

- 9 a. Define Fading. And also explain the concept of Capacity of flat and frequency selective fading channels. 6M
b. What is MIMO? Explain the parallel decomposition of MIMO channels. 6M

OR

- 10 Explain different cellular wireless communication standards. 12M

***** END *****