



M 22907

Reg. No. : .....

Name : .....

**VIII Semester B.Tech. Degree (Reg./Sup. – Including Part Time)  
Examination, April 2013  
(2007 Admn. Onwards)  
PT 2K6/2K6 EC 804 : WIRELESS MOBILE COMMUNICATION**

Time : 3 Hours

Max. Marks : 100

***Instruction : Answer all questions.***

I. Answer all the questions :

- a) Explain the frequency reuse concept used in cellular systems. 5
- b) What is Average Fade Duration ? 5
- c) List any 5 advantages of Spread Spectrum Systems. 5
- d) List the features of 3G Systems. 5
- e) How is capacity improvement achieved by sectoring ? 5
- f) What is Jamming margin ? 5
- g) Explain time selective fading. 5
- h) List the advantages of wireless communication. 5

II. a) Explain the 2G and 2.5 G mobile telephone standards. List the sources to determine the following parameters for each standard :

- i) RF channel BW
- ii) Peak data rate
- iii) Maximum number of concurrent users
- iv) Modulation type. 15

OR

- b) Explain the different steps involved in making a cellular telephone call. 15

P.T.O.



III. a) Explain the various channel assignment strategies used in cellular system. 15

OR

b) Explain the need for Handoff in mobile system. Explain the different Handoff strategies used. 15

IV. a) Explain time dispersion and frequency selective fading. 15

OR

b) Explain the impulse response model of a multipath channel. 15

V. a) Draw the block diagram of RAKE receiver and explain. 15

OR

b) Explain the performance of Direct Sequence Spread Spectrum Systems. 15

---