Reg. No. : | | | | | | | | | | |

Question Paper Code: 35806

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Fifth Semester

Information Technology

01UIT506 – WIRELESS COMMUNICATION

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Differentiate cellular telephony and cordless telephony.
2. What is meant by frequency reuse?
3. State the use of outage probability.
4. What is propagation model?
5. Define digital modulation.
6. What are narrowband channels?
7. State the function of adaptive equalizers?
8. Define Macroscopic diversity.
9. Draw the GSM frame structure.
10. State the use of cyclic prefix.

PART - B (5 x 16 = 80 Marks)

11. (a) Discuss about the evolution of mobile radio communications in detail. (16)

Or

(b) Discuss briefly about the various methods for improving average and capacity in cellular systems. (16)

12. (a) Discuss about combine path loss and shadowing model techniques. (16)

Or

(b) Illustrate briefly about various empirical path loss models. (16)

13. (a) Discuss in detail about small-scale multipath measurements. (16)

Or

(b) Write about impulse response model of a multipath channel in detail. (16)

14. (a) Explain various diversity techniques used in wireless communication. (16)

Or

(b) Discuss in detail about RAKE receiver. (16)

15. (a) Write a case study for representation of IEEE 802.11a wireless LAN elaborately on par with recent trends and standards. (16)

Or

(b) (i) Explain briefly about the classification of GSM logical channels. (8)

(ii) Describe call handling in AMPS and ITACS. (8)