

Code No: 118FG

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech IV Year II Semester Examinations, May - 2017****WIRELESS COMMUNICATIONS AND NETWORKS****(Electronics and Communication Engineering)****Time: 3 hours****Max. Marks: 75**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A**(25 Marks)**

- 1.a) What are prioritizing handoffs? [2]
- b) **Explain** about Sectoring. [3]
- c) **Discuss** about Hata model. [2]
- d) Write about Site specific modeling. [3]
- e) Discuss about level crossing. [2]
- f) Write a short notes on Doppler spread [3]
- g) Explain about frequency diversity. [2]
- h) Discuss about Zero forcing algorithm. [3]
- i) **Write** about WLL. [2]
- j) **List the** disadvantages of WLAN. [3]

PART - B**(50 Marks)**

2. Explain in detail about Trunking and Grade of Service. [10]
- OR**
- 3.a) Discuss briefly about frequency reuse.
 - b) Write short notes on channel assignment strategies. [5+5]
- 4a) Discuss about Brewster angle.
 - b) Explain about Longley- Ryce model [3+7]
- OR**
5. Explain in detail about Ground Reflection Model [10]
 6. Discuss in detail about the factors that influence small scale fading. [10]
- OR**
7. Discuss about fast fading and slow fading. [10]
 8. Explain in detail about Decision Feedback Equalization. [10]
- OR**
9. Derive the expression for Maximal Ratio Combining Improvement [10]
 10. Discuss in detail about WLAN Topologies. [10]
- OR**
11. Write short notes on:
 - a) Wireless PANS
 - b) Hiper LAN [5+5]