

Code No: 118PG

R13

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. [5]
- b) Write short notes on channel assignment strategies. [5]
- 4a) Discuss about Brewster angle. [3]
- b) Explain about Longley- Ryce model [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]