R13

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year II Semester Examinations, April - 2018
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 is intersystem handoff?	[2]
b)	Discuss about Longley-Ryce Model.	[3]
c)	Define Brewster angle.	[2]
d)	What are the Time Dispersion Parameters of Multipath channels?	[3]
e)	Discuss about advantages and disadvantages of WLAN.	[2]
f)	Discuss about Ericsson Multiple Breakpoint Model.	[3]
g)	Define Adjacent-channel Interference.	[2]
h)	Define equalization.	[3]
i)	List the advantages of WLAN.	[2]
j)	Write about hiper lan WLL.	[3]

PART - B
(50 Marks)

2.	Explain the various types of Handoff processes available.	[10]
	OR	
3.	Explain in detail about Trunking and Grade of Service.	[10]
4.a)	Explain knife Edge Diffraction Model.	
b)	With neat diagrams explain the Free Space Propagation Model.	[5+5]
	OR	
5.	Derive the Impulse response model of a Multipath channel.	[10]
6.	Discuss in detail different types of small scale fading.	[10]
	OR	
7.	What is small scale fading? What are the factors influencing small scale fading?	[10]
8.	Explain LMS and Recursive Least Square algorithm.	[10]
	OR	
9.	Derive the expression for Maximal Ratio Combining Improvement.	[10]
10.a)	Draw the configuration of IEEE802.11 architecture.	
b)	Explain the physical layer specications of IEEE802.11 using infrared.	[5+5]
	OR	
11.	Compare and contrast IEEE 802.11 a, b, g and n standards.	[10]

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