

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2017 – 18 Examination

Semester: 1
Subject Code: 03204101
Subject Name: Wireless Communication

Date: 26-12-2017
Time: 2.00pm to 4.30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 A) Explain the term: (05)

- A) Maximal Ratio Combining B) Equal Gain Combining,
C) Polarization Diversity D) Frequency Diversity E) Time Diversity

B) Briefly Describe Hand-off strategies in cellular system. Compare soft and hard Hand-off. (05)

C) Draw and explain Block Diagram of a complex equivalent baseband MIMO (05)
communication system

Q.2 Answer the following questions. (Attempt any three) (Each five mark) (15)

A) Define following terms:

- (A) Control Channel (B) Forward Channel
(C) Cell dragging (D) Reverse Channel (E) Half Duplex System

B) Explain WLL Technology and its feature?

C) What do you mean by Wi-Fi? Describe specification and security in Wi-Fi system

D) Write a short note on Wi-MAX.

Q.3 A) Write a short note Bluetooth Technology. (07)

B) Short note on different diversity techniques. (08)

OR

B) Draw and explain Multicarrier Transmitter and Receiver for non-overlapping (08)
Subcarriers OFDM block diagram.

Q.4 A) Explain narrowband fading models for multipath channel models. (07)

OR

A) Explain GPRS system architecture. (07)

B) Discuss frequency reuse Concept (08)