# SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS, FEROZEPUR

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# B.Tech. || ECE || 6th Sem

Wireless & Mobile Communication

Subject Code: BTEC-603A

Paper ID: 2015 Batch

Time allowed: 3 Hrs

Max Marks: 60

#### Important Instructions:

· All questions are compulsory

## PART A (10x 2marks)

- Q. 1. Short-Answer Questions:
  - (a) What is ZigBee?
  - (b) Describe Concept of frequency reuse channels
  - (c) What is Handoff?
  - (d) Give features of FDMA.
  - (e) What is Fading and how to overcome?
  - (f) Differentiate between Cell splitting and Cell sectoring.
  - (g) What do you mean by Spread Spectrum Multiple Access?
  - (h) Enlist features of 4G wireless systems
  - (i) Explain AMPS and ETACS.
  - (j) Distinguish between Maximal ratio combining and Equal gain combining

### PART B (5×8marks)

Q. 2. Draw block diagram of basic cellular system. Also explain operation of CO1 cellular systems.

OR

Write short note on a) Bluetooth b) Cordless Telephone Systems

COI

CO2

CO2

CO3

Q.3. Discuss Co-channel interference reduction factor. Derive the expression for C/I in omni-directional antenna system.

OR

Discuss the various handoff strategies used in cellular mobile communication

Q. 4. Describe the Concept of diversity branches and signal paths.

Draw block diagram of RAKE Receiver and Also explain its elements. CO3

Q. 3.	OR OR	CO
	Compare Pure ALOHA and Slotted ALOHA	CO
	Explain System Architecture of GSM. Also discuss its frame Structure.  OR	COS
	What is CDMA digital cellular standard (IS-95)? Describe its reverse channel	COS