



SYNERGY SCHOOL OF ENGINEERING, DHENKANAL
LESSON PLAN SESSION: (2026-2027)

Discipline: Computer Science & Engineering	Semester: 5th, Winter-2026	Name of the Faculty: Aurobinda Gochhayat Email-ID: aurobindagochhayta@gmail.com
Subject: Mobile Computing (CSEPE 303A)	No of Days/Week: 03	Start Date: 01/07/2026 End Date: 05/11/2026

Week	Class Day	Theory Topics
1ST	1ST	Introduction to Mobile Computing
	2ND	Evolution of Mobile Communication
	3RD	Advantages and Disadvantages of Mobile Systems
2ND	1ST	Cellular Industry Overview
	2ND	Cell Concepts and Cellular Architecture
	3RD	Wireless Networks Fundamentals
3rd	1ST	Wired vs Wireless Systems
	2ND	Infrared Communication Systems
	3RD	Cellular Radio Systems
4th	1ST	Wireless LAN Concepts
	2ND	Voice Signal Characteristics
	3RD	Frequency Spectrum and Signal Transmission
5th	1ST	Digital Signals
	2ND	Broadband and Baseband Signals
	3RD	Unit-I & II Revision and Assignment
6th	1ST	Cell Layout and Structure
	2ND	Path Loss and Propagation Delay
	3RD	Fading in Wireless Communication
7th	1ST	Cell Size and Shape
	2ND	Frequency Reuse Concept
	3RD	Spectrum Efficiency
	1ST	Cell Capacity and Call Handling

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8th	2ND	Channel Requirements
	3RD	Cell Splitting and Cell Sectoring
9th	1ST	Multiplexing Concepts
	2ND	FDM and FDMA Techniques
	3RD	TDM and TDMA Techniques
10th	1ST	CDMA Technology
	2ND	Spread Spectrum and Frequency Hopping
	3RD	AMPS Introduction
11th	1ST	Voice Compression Techniques
	2ND	Data Compression Techniques
	3RD	V.42 and Fax Compression
12th	1ST	GSM Architecture
	2ND	SIM and GSM Operations
	3RD	Registration, Call Establishment and Roaming
13th	1ST	GSM Channels and Operations
	2ND	Bluetooth Technology
	3RD	Bluetooth Architecture and Applications
14th	1ST	IEEE 802.11 Wireless LAN Standards
	2ND	Wireless Home Networking
	3RD	Security and Privacy in Mobile Computing
15th	1ST	Encryption Concepts and Public Key Encryption
	2ND	Authentication Models, Smart Cards and Biometrics
	3RD	Final Revision, Quiz and Internal Test

Prepared By:

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