

LESSON PLAN

Department: CSE		Semester:5 th	Name of Faculty: Miss Khipita Mukhi
Subject: MOBILE COMPUTING (TH-4A) Week	No.ofdays/ week Class allotted: 3 ClassDay	Effective From Date: 01.07.2026	
		Topic to be Covered:	
		Theory	
		UNIT 1: Introduction to Wireless and Mobile Network:	
1 st	1 st	Historic background, Cellular Industry,	
	2 nd	advantages & disadvantages of Mobile systems	
	3 rd	Cell concepts, Wireless Network	
2 nd	1 st	Cell concepts, Wireless Network	
	2 nd	1. Doubt Clearing class 2. Quiz test 3. Assignment	
	3 rd	UNIT 2: Basics of Wireless & Mobile System: Wire based and wireless systems	
3 rd	1 st	Infrared systems, cellular radio	
	2 nd	Concepts of wireless LANS	
	3 rd	voice signals-its characteristics	
4 th	1 st	Frequency spectrum, digital signal,	
	2 nd	Broadband and base band signals	
	3 rd	1. Doubt Clearing class 2. Quiz test 3. Assignment	
5 th	1 st	UNIT 3:Cellular Systems: Cell layout, path-loss, propagation delay, fading size and shape of cell	
	2 nd	Concepts of frequency reuse, spectrum efficiency,	
	3 rd	Cell capacity to handle calls,	
6 th	1 st	Call demand in a cell, channel requirement,	
	2 nd	cell splitting, cell sectoring concept	
	3 rd	1. Doubt Clearing class 2. Quiz test 3. Assignment	
7 th	1 st	UNIT 4: Channel Utilization Schemes: Concepts of Multiplexing: FDM, FDMA, TDD, TDM,	
	2 nd	Concepts of Multiplexing: FDM, FDMA, TDD, TDM	
	3 rd	CDMA	
8 th	1 st	CDMA	
	2 nd	CDMA	
	3 rd	Concepts of spread spectrum and frequency hopping	
9 th	1 st	Introductory idea on AMPS	
	2 nd	Compression operations - voice compression and data compression	
	3 rd	V.42, fax compression-introductory idea	
10 th	1 st	1. Doubt Clearing class 2. Quiz test 3. Assignment	
	2 nd	UNIT 5: Global System for Mobile Communication (GSM): Historical background	
	3 rd	SIM and GSM	

11 th	1 st	SIM and GSM
	2 nd	Overview of GSM operations - Registration
	3 rd	Call Establishment
12 th	1 st	Roaming, GSM channel and operations
	2 nd	Roaming, GSM channel and operations
	3 rd	1. Doubt Clearing class 2. Quiz test 3. Assignment
13 th	1 st	UNIT 6: Blue tooth and Wireless LANS: Need of compatibility, Bluetooth concepts
	2 nd	Comparison with IR system, Architecture, potential applications,
	3 rd	IEEE802.11x Wireless LAN standard-basic configuration and architecture
14 th	1 st	concepts of wireless home networking
	2 nd	1. Doubt Clearing class 2. Quiz test 3. Assignment
	3 rd	UNIT 6: Security and Privacy: Introduction, frequency hopping spread spectrum,
15 th	1 st	Encryption concepts, Public Key Encryption
	2 nd	Authentication Model, Smart Card, Biometric Authentication
	3 rd	1. Doubt Clearing class 2. Quiz test 3. Assignment

Rasmita Mukhi

Signature of Faculty

Rasmita Patra

Miss. Rasmita Patra

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