C.V. RAMAN POLYTECHNIC, BBSR

Department of Computer Science & Engineering

LESSON PLAN

Session (2025-2026)

Discipline: Computer Science & Engineering	**Semester: 5th, Winter/2025**	**Name of the Teaching Faculty: Mr. Amardeep Das** **Email ID: amardeep@cvrp.edu.in**
Subject: Mobile Computing, Theory-05	**No. Of Days / Week :04**	**Start Date: 14.7.2025** **End Date: 15.11.2025**

Week	Class Day	Theory Topics
1st	1st	**Unit-1: Introduction to Wireless networks & Mobile Computing** Networks Wireless Networks
	2nd	Mobile Computing
	3rd	Mobile Computing Characteristics Application of Mobile Computing
	4th	**Unit-2: Introduction to Mobile Development Framework** C/S architecture n-tier architecture
2nd	1st	n-tier architecture and www Peer-to Peer architecture Mobile agent architecture
	2nd	**Unit-3: Wireless Transmission** Introduction Signals, Period, Frequency and Bandwidth. Antennas
	3rd	Signal Propagation
	4th	Multiplexing
3rd	1st	Modulation
	2nd	Modulation
	3rd	Cellular System
	4th	Spread Spectrum
4th	1st	**Unit-4: Medium Access Control** Introduction Hidden/ Exposed Terminals
	2nd	The basic Access Method Near / Far Terminals

	3rd	SDMA, FDMA, TDMA, CDMA
	4th	SDMA, FDMA, TDMA, CDMA
5th	1st	**Unit-5: Wireless LANs** Wireless LAN and communication, Infrared
	2nd	Radio Frequency IR Advantages and Disadvantages,
	3rd	Wireless Network Architecture Logical Types of WLAN
	4th	IEEE 802.11, MAC layer
6th	1st	Security, Synchronization, Power Management, Roaming
	2nd	Bluetooth Overview
	3rd	**Quiz**
	4th	**Unit-6: Ubiquitous Wireless Communication** Scenario of Mobile Communication
7th	1st	Mobile Communication Generations 1G to 3G
	2nd	3rd Generation Mobile Communication Network
	3rd	Universal Mobile telecommunication System (UMTS)
	4th	**Unit-7: Mobile IP** Working with mobile IP, Mobile IP Entities, Mobile IP Operation
8th	1st	Mobility Agents, Components of Mobile IP
	2nd	Mobile IPv6 Features, Mobile IPv6 Address Types, Mobile IPv6 Address Scope
	3rd	**Unit-8: Mobile Computing** WWW architecture for Mobile computing,
	4th	Need of WAP
9th	1st	Benefits of WAP, Examples of WAP
	2nd	WAP- Architecture, WAP protocols
	3rd	WAP- Architecture, WAP protocols
	4th	WML, WAP Push architecture
10th	1st	Push-Pull based data acquisition
	2nd	Push-Pull based data acquisition
	3rd	I-mode, WAP 2.x
	4th	I-mode, WAP 2.x
11th	1st	**Unit-9: Wireless Telecomm Networks** GSM
	2nd	GSM Architecture
	3rd	GSM Working Principle
	4th	GSM Working Principle
12th	1st	GPRS

	2nd	GPRS Architecture
	3rd	IS-95
	4th	CDMA-2000
13th	1st	CDMA-2000
	2nd	W-CDMA
	3rd	Wireless Sensor Networks
	4th	**Unit-10: Messaging Services** Short Message Services (SMS)
14th	1st	Multimedia Message Services (MMS)
	2nd	Multimedia transmission over wireless
	3rd	**Quiz**
	4th	**Doubt clearing class and Discussion of Question Answer**
15th	1st	**Doubt clearing class and Discussion of Question Answer**
	2nd	**Doubt clearing class and Discussion of Question Answer**
	3rd	**Doubt clearing class and Discussion of Question Answer**
	4th	**Doubt clearing class and Discussion of Question Answer**

Concerned Faculty **H.O.D**