PNS SCHOOL OF ENGINEERING & TECHNOLOGY, NISHAMANI VIHAR, MARSHAGHAI, KENDRAPARA
LESSION PLAN

BRANCH : COMPUTER SCIENCE & ENGG.	SEMESTER : 5TH		NAME OF THE TEACHING FACULTY : ER. AMARENDRA SAHOO
SUBJECT : MOBILE COMPUTING	NO. OF DAYS PER WEEK : 6 CLASS ALLOTTED : 71		SEMESTER FROM DATE : 15-09-2022 TO 22-12-2022 NO. OF WEEKS : 14

WEEK	UNIT	DATE	THEORY/PRACTICL TOPICS
1st Week	**TOPIC - 1** Introduction to Wareless Networks & Mobile Computing	15.09.2022	Network & its type- LAN, WAN, MAN, PAN etc.
		16.09.2022	What is mobile computing ? Brief discussion on communication system.
		19.09.2022	Characteristics of Mobile Computing.
		20.09.2022	Appication of Mobile Computing
		21.09.2022	What is signal and its characterestics ?
2nd Week	**TOPIC - 1** Introduction to Wareless Networks & Mobile Computing **TOPIC - 2** Introduction to Mobile Development Frame	22.09.2022	Application of Mobile Computing
		23.09.2022	Revision of Chapter-1 or Class Test
		24.09.2022	Introduction to mobile development frame work topic- 2 start.
		26.09.2022	Client Server Architectures
		27.09.2022	N-Tier Architectures
		28.09.2022	The Word Wide Web.
3rd Week	**TOPIC - 2** Introduction to Mobile Development Frame	29.09.2022	N-Tier Architectures and the WWW
		30.09.2022	Peer to Peer Architectures.
4th Week	**TOPIC - 2** Introduction to Mobile Development Frame Work **TOPIC-3** Wireless Transmission	10.10.2022	Mobile Agent Architectures.
		11.10.2022	Introduction, Signal-Time Period, Frequency, Band Width, Wave Length.
		12.10.2022	Antennas and its type, Transducers.
5th Week	**TOPIC-3** Wireless Transmission	13.10.2022	Signal Propagation through different medium.
		14.10.2022	Multiplexing and its type- SDM, FDM, TDM, CDM.
		15.10.2022	Space Divison Multiplexing - SDM
		18.10.2022	Frequency Division Multiplexing- FDM
		19.10.2022	Time Division Multiplexing - TDM Code Division Multiplexing- CDM
6th Week	**TOPIC-3** Wireless Transmission	20.10.2022	What is modulatin ? Need for Modulatin, Career Wave, Basement Signal.
		21.10.2022	Types of Modulation- Analog Modulation and Digital Modulation. Type of Analog Modulation- AM, FM, PM
		22.10.2022	Digital Modulatin- ASK, FSK, PSK Spread Spctrum Communicatin. DSSS and FHSS
		26.10.2022	Cellular System, Cells its different types, Clusters, Frequency Reuse, Cell Splitting.
7th Week	**TOPIC-3** Wireless Transmission **TOPIC-4** Medium Access Control.	27.10.2022	Hand off, Cellular Radio.
		28.10.2022	Introduction - Hiden / Exposed Terminals Career Sence Multiple Access with Collision Dection (CSMA/CD)
		29.10.2022	Basic Access Method - Problem in Wareless Networks.
		31.10.2022	CSMA / CD Protocol Works.
		01.11.2022	Near / Far Terminals.
		02.11.2022	Frequency Division Multiple Access (FDMA)

8th Week	**TOPIC-4** Medium Access Control. **TOPIC-5** WIRELESS LANS	03.11.2022	Time Division Multiple Access - TDMA Code Division Multiple Access- CDMA Space Division Multiple Access - SDMA
		04.11.2022	Wireless LANS & Communication Infrared.
		05.11.2022	Radio Frequency, IR Advangages, IR Disadvantages, RF Advantages, RF Disadvantages.
		09.11.2022	Wireless Network Architecture
9th Week	**TOPIC-5** WIRELESS LANS	10.11.2022	Types of WLAN
		11.11.2022	IEEE 802.11 and its architecture.
		12.11.2022	MAC LAYER - Security.
		14.11.2022	Synchronization - Timer Synchronization IBSS, Timer Synchronizatin in an infrastructure BSS
		15.11.2022	Power Management - Power Management in an independent VSS, In an infrastructure BSS.
10th Week	**TOPIC-5** WIRELESS LANS **TOPIC-6** Ubiquitous Wireless Communication.	17.11.2022	Roaming, Bluetooth
		18.11.2022	Bluetooth Communication Types- Diponent and Scatternet.
		19.11.2022	Introduction - Scenario of Mobile Communication.
		21.11.2022	Mobile Communication Generation- 1G to 3G.
		22.11.2022	3G Mobile Communication Network.
		23.11.2022	Universal Mobile Telecommunication System (UMTS)
11th Week	**TOPIC-6** Ubiquitous Wireless Communication. **TOPIC-7** Mobile IP	24.11.2022	UMTS Services
		25.11.2022	UMTS Architecture
		26.11.2022	UMTS User Equipments.
		28.11.2022	Overview, Working of Mobile IP
		29.11.2022	Mobile IP Entities- Mobile Node, Home Agent, Foreign Agent, COA, CA, Home Address, HL, FN
		30.11.2022	Components of Mobile IP, Mobile IP V6 Features.
12th Week	**TOPIC-7** Mobile IP **TOPIC-8** Mobile Computing	01.12.2022	Mobile IP V6 Address Type.
		02.12.2022	Mobile IP V6 Address Scope, Mobile IP Operation.
		03.12.2022	Discovering Care of address, Registration of Care of Address Process.
		05.12.2022	World Wide Web - WWB - Architecture of Mobile Computing
		06.12.2022	Wireless Application Protocol (WAP), Mid of WAP.
		07.12.2022	Benefits of WAP, Examples of WAP.
13th Week	**TOPIC-8** Mobile Computing **TOPIC-9** Wireless Telecom Network.	08.12.2022	WAP Architecture.
		09.12.2022	WAP Protocol, WAP Transport Layer Wireless Datagram Protocol (WDP)
		10.12.2022	Push-Pull Based Data Acquisition.
		12.12.2022	I Mode, Wireless Markup Language (WML), WML Script Language, Key Features.
		13.12.2022	I Mode, WAP - 2X
		14.12.2022	GSM Archietecher
14th Week	**TOPIC-9** Wireless Telecom Network. **TOPIC-10** Messaging Services	15.12.2022	GPRS- Archietecher
		16.12.2022	IS - 95, CDMA - 2000
		17.12.2022	WCDM, Wireless Senssor Networks
		19.12.2022	Short Message Service (SMS)
		20.12.2022	Multimedia Message Service (MMS)
		21.12.2022	Multimedia Transmission Over Wireless.
		22.12.2022	Revision, Class Test, Doubt Clearing.