Academic Lesson Plan of Summer 2025

Department: CSE	Semester:6th	Name of the Teaching Faculty: NUSHRAT BARI
Subject: Internet Of Things (IOT)	No. of days/per week class allotted 4p/week	Semester from:04/02/2025
		No. of weeks:15
		Topics to be covered:

WEEK	DAYS	TOPIC
1st week	1st	Introduction of IOT, Character of IOT
	2nd	Application of IOT, IOT catagories
	3rd	Base line Technology, Sensor
	4th	Actuators,IOT components &implemantation
2nd week	1st	challenges of IOT
	2nd	Networking terminology, prefix allotment
	3rd	mobility on adressing ,multihoming
	4TH	deviation of regular web
3rd week	1st	IOT identification &data protocol
	2nd	Technology of connectivity
	3rd	IEEE 802.15.4 ,Zigbee, Doubt class
	4th	6 LOWPAN,RFID,HART & Wireless HART
4th week	1st	NFC, Bluetooth, Z, wave,ISA 100.11.A
	2nd	wireless sensors & components
	3rd	modes of detection of sensors
	4th	challenges in WSN, Sensor web
5th week	1st	co-operation & behaviour of nodes in WSN
	2nd	Self mgmt , social sensing WSN
	3rd	application of WSN
	4th	Wireless multimedia sensor network
6th week	1st	Wireless nano sensor network
	2nd	under water acoustic sensor network
	3rd	WSN coverage
	4th	Stationary WSN, Mobile WSN
7th week	1st	M2M commmunication
	2nd	M2M Ecosystem, M2M platform
	3rd	Interoperability, Doubt in communication
	4th	Fundamental of Arduino
8th week	1st	Features of Arduino
	2nd	Components of arduino board
	3rd	Arduino IDE
	4th	Case studies
9th WEEK	1ST	IOT with Rasbery Pi
	2ND	Limitation of current network
	3RD	Origin SDN
	4TH	Discussion of Rasbery Pi
10th week	1st	Introduction to software defining network
	2nd	Limitation of current network
	3rd	Origin of SDN
	4th	Architecture of SDN
11th week	1st	Rule placement , open flow protocol
	2nd	controller placement
	3rd	security of SDN
	4th	Intergrating SDN in IOT

12th week	1st	Introduction to smart Home
	2nd	Origin of smart technology
	3rd	Some example of smart home technology
	4th	implementation of smart home
13th week	1st	HAN, examples of HAN
	2nd	Smart home benefits, & issues
	3rd	Smart cities overview
	4th	characteristics of smart cities
14th week	1st	Smart city framework, challenges
	2nd	Data fusion
	3rd	Smart packing , Energy mgmt in smart cities
	4th	Introduction to Industrial IOT
15th week	1st	IIOT requirements
	2nd	Design consideration, application of IIOT
	3rd	Benefits and challenges of IIOT
	4th	Discussion some question

Swain 3/2/2025

HOD

Signature of Faculty

Sr. Lecture, CSE