



### LESSON PLAN (SUMMER-2023)

DISCIPLINE: ELECTRONICS AND TELECOMMUNIC ATION ENGG.	SEMESTER:  6	NAME OF THE TEACHING FACULTY: PRAKASH CHANDRA DAS	
SUBJECT: INTERNET OF THINGS	No. of Days/per week class allotted: 4	Semester From date: 14/02/2023 To date:- 23/05/2023  No. of Weeks:15	
Week	Class Day	Theory Topics	Chapte r
	1st	What is IoT. Architectural Overview,	1. Introduction to IoT
1st	2nd	Design principles and needed capabilities,	
	3rd	IoT Applications, Sensing, Actuation,	
	4th	Basics of Networking, M2M and IoT Technology	
2nd	1st	Fundamentals- Devices and gateways,	2. Elements of IoT
	2nd	Data management, Business processes in IoT	
	3rd	Everything as a Service(XaaS),	
	4th	Role of Cloud in IoT, Security aspects in IoT.	
3rd	1st	Hardware Components- Computing (Arduino,Raspberry Pi),	
	2nd	Communication, Sensing, Actuation	
	3rd	I/O interfaces	
	4th	Software Components- Programming API's	
4th	1st	Software Components- Programming API's	3. IoT Application Development
	2nd	Protocols- MQTT,	
	3rd	ZigBee, ,	
	4th	Bluetooth,	
5th	1st	CoAP	
	2nd	UDP, TCP.	
	3rd	Implementation of Device integration	
	4th	Implementation of Device integration	
6th	1st	Data acquisition and integration	
	2nd	Data acquisition and integration	
	3rd	Data acquisition and integration	
	4th	Device data storage-	
7th	1st	Device data storage-	
	2nd	Device data storage-	
	3rd	Unstructured data storage on cloud/local server	
	4th	Unstructured data storage on cloud/local server	
8th	1st	Solution framework for IoT applications	
	2nd	Solution framework for IoT applications	
	3rd	Authentication, authorization of devices	
	3rd	Authentication, authorization of devices	
9th	1st	Understanding the IoT Big Picture	

	2nd		
	3rd	Building the Internet of Things	4. Smart Technology
	4th	Building the Internet of Things	
10th	1st	Understanding Smart Devices, Building Blocks	
	2nd	Understanding Smart Devices, Building Blocks	
	3rd	Understanding Network Connections	
	4th	Understanding IP Addresses	
11th	1st	Understanding IP Addresses	
	2nd	Understanding cellular Network & Mesh Network	
	3rd	Understanding cellular Network & Mesh Network	
	4th	Understanding cellular Network & Mesh Network	
12th	1st	What is Smart TV & its use	5. smart tv
	2nd	What is inside Smart TV	
	3rd	What is inside Smart TV	
	4th	What a Smart TV does	
13th	1st	What a Smart TV does	
	2nd	Smart TV Operating Systems	
	3rd	Smart TV Operating Systems	
	4th	What is Smart TV Set-Top Devices	
14th	1st	Intergrating Smart TV in to IOT	6.IOT case studies
	2nd	Intergrating Smart TV in to IOT	
	3rd	smart home	
	4th	smart car	
15th	1st	smart cities	
	2nd	smart drone	
	3rd	industrial automation	
	4th	industrial automation	

Prakash Chandra Day  
Signature of Faculty

14/12/23  
H.O.D

Principal