

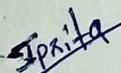
C.V. RAMAN POLYTECHNIC BBSR

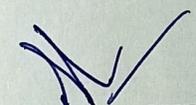


Lesson Plan

Discipline: Diploma Branch: CSE	Semester: 6th	Name of the Teaching Faculty: Ipsita Ankita Hota
Subject: IOT(TH-2)	No. of Days/per week class allotted: 60days/ 4 class per week	Semester From Date: 22/12/2025 ToDate:18/04/2026 No. of Weeks:15
Week	Class Day	Theory
1 st	1 st	Introduction to Internet of Things
	2 nd	Characteristics of IoT, Applications of IoT
	3 rd	IoT Categories, IoT Enablers and connectivity layers
	4 th	Baseline Technologies
2 nd	1 st	Sensor ,Actuator ,IoT components and implementation
	2 nd	Challenges for IoT
	3 rd	IOT Networking
	4 th	Terminologies
3 rd	1 st	Gateway Prefix allotment
	2 nd	Impact of mobility on Addressing
	3 rd	Multihoming, Deviation from regular Web
	4 th	IoT identification and Data protocols
4 th	1 st	Connectivity Technologies
	2 nd	Introduction
	3 rd	IEEE 802.15.4
	4 th	ZigBee, 6LoWPAN
5 th	1 st	RFID, HART and wireless HART
	2 nd	NFC, Bluetooth, Z wave, ISA100.11.A
	3 rd	Wireless Sensor Networks
	4 th	Introduction to WSN and Components of a sensor node
6 th	1 st	Modes of Detection, Challenges in WSN, Sensor Web
	2 nd	Cooperation and Behaviour of Nodes in WSN, Self Management of WSN, Social sensing WSN, Application of WSN
	3 rd	Wireless Multimedia sensor network, Wireless Nanosensor Networks, Underwater acoustic sensor networks
	4 th	WSN Coverage, Stationary WSN, Mobile WSN
7 th	1 st	M2M Communication
	2 nd	M2M communication

8 th	3 rd	M2M Ecosystem
	4 th	M2M service Platform
9 th	1 st	Interoperability
	2 nd	Interoperability
	3 rd	Programming with Arduino
	4 th	Features of Arduino
10 th	1 st	Components of Arduino Board
	2 nd	Arduino IDE
	3 rd	Case Studies
	4 th	Programming with Raspberry Pi
11 th	1 st	Architecture and Pin Configuration
	2 nd	Case studies
	3 rd	Implementation of IoT with Raspberry Pi
	4 th	Implementation of IoT with Raspberry Pi
12 th	1 st	Software defined Networking
	2 nd	Limitation of current network
	3 rd	Origin of SDN,SDN Architecture
	4 th	Rule Placement, Open flow Protocol
13 th	1 st	Controller placement
	2 nd	Security in SDN,Integrating SDN in IoT
	3 rd	Smart Homes
	4 th	Origin and example of Smart Home Technologies
14 th	1 st	Smart Home Implementation
	2 nd	Home Area Networks(HAN)
	3 rd	Smart Home benefits and issues
	4 th	Smart Cities
15 th	1 st	Characteristics of Smart Cities
	2 nd	Smart city Frameworks, Challenges in Smart cities
	3 rd	Data Fusion,Smart Parking
	4 th	Energy Management in Smart cities
15 th	1 st	Industrial IoT
	2 nd	IIoT requirements,Design considerations
	3 rd	Applications of IIoT,Benefits of IIoT
	4 th	Challenges of IIoT


Signature of the Faculty


Signature of HOD