C.V. RAMAN POLYTECHNIC, BBSR

LESSON PLAN

Session (2026-2027)

Discipline: Diploma **Branch: CSE**	**Semester:5th**	**Name of the Faculty: Ipsita Ankita Hota**
Subject: CSEPC 301 **Internet of things(IOT)**	**No. of Days/week:** **45 days/3 class per week**	**Semester From Date: 01/07/2026** **To Date : 05/11/2026** **No. of Weeks: 15**

Week	Class Day	Theory Topics
1st	1st	Introduction to Internet of Things (IoT)
	2nd	Definition and Significance of IoT
	3rd	Historical Evolution of IoT
2nd	1st	Future Prospects of IoT
	2nd	Applications of IoT
	3rd	IoT Architecture
3rd	1st	Sensors and Actuators
	2nd	Connectivity and Data Processing
	3rd	Arduino Microcontroller
4th	1st	Raspberry Pi
	2nd	Operating Systems for IoT
	3rd	Middleware for IoT
5th	1st	Temperature Sensors
	2nd	Humidity Sensors
	3rd	Motion Sensors

6th	1st	Other Sensors (Light, Gas, Pressure, etc.)
	2nd	Actuators: Motors
	3rd	Actuators: Relays and Control Mechanisms
7th	1st	Sensor Interfacing with Microcontrollers
	2nd	Actuator Interfacing with Microcontrollers
	3rd	Analog Data Acquisition
8th	1st	Digital Data Acquisition
	2nd	Signal Conditioning Techniques
	3rd	Signal Filtering Techniques
9th	1st	Data Processing
	2nd	Data Storage
	3rd	MQTT Protocol
10th	1st	CoAP Protocol
	2nd	HTTP Protocol
	3rd	Wi-Fi Communication
11th	1st	Bluetooth Communication
	2nd	Zigbee Communication
	3rd	LoRaWAN Communication
12th	1st	Ethernet Communication
	2nd	Serial Communication
	3rd	IP Addressing and Subnetting

13th	1st	Network Topologies
	2nd	IPv6 for IoT
	3rd	IoT Platforms (AWS IoT, Google Cloud IoT)
14th	1st	Data Analytics and Visualization
	2nd	Edge Computing
	3rd	Cloud Computing (IaaS, PaaS, SaaS)
15th	1st	Cloud Integration and Data Management
	2nd	IoT Security and Privacy, Authentication, Encryption,
	3rd	Data privacy laws and regulations, User consent and data ownership, Best Practices for ensuring privacy in IoT applications.

Ipsita Ankita Hota

SIGNATURE OF FACULTY

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