

LESSON PLAN

BRANCHE: COMP.SC. & ENGG.	SEMESTER : 6 TH	NAME OF TEACHING FACULTY : ER. ADITYA NARAYAN JENA
SUBJECT: INTERNET OF THINGS	NO. OF DAYS/ PER WEEK CLASS ALLOTTED : 05	SEMESTER FROM DATE : 14.02.2023 TO 23.05.2023 NO. OF WEEKS : 15
WEEK	CLASSDAY	THEORY TOPICS
1ST	1 st	1.Introduction to Internet of Things: Introduction, Characteristics of IoT, Applications of IoT
	2 nd	IoT Categories, IoT Enablers and connectivity layers
	3 rd	Baseline Technologies, Sensor
	4 th	Actuator
	5 th	Revision
2ND	1 st	IoT components and implementation, Challenges for IoT
	2 nd	Question Answer Discussion
	3 rd	2.IOT Networking: Terminologies, Gateway Prefix allotment, Impact of mobility on Addressing
	4 th	Multihoming
	5 th	Revision
3RD	1 st	Deviation from regular Web
	2 nd	IoT identification and Data protocols(Cont..)
	3 rd	IoT identification and Data protocols
	4 th	Question Answer Discussion
	5 th	Revision
4TH	1 st	3.Connectivity Technologies: Introduction, IEEE 802.15.4
	2 nd	ZigBee, 6LoWPAN
	3 rd	RFID, HART and wireless HART
	4 th	NFC, Bluetooth,
	5 th	Revision
5TH	1 st	Z wave, ISA100.11.A
	2 nd	class Test
	3 rd	4.Wireless Sensor Networks: Introduction, Components of a sensor node, Modes of Detection
	4 th	Challenges in WSN ,Sensor Web

	5 th	Revision
6 TH	1 st	Cooperation and Behaviour of Nodes in WSN, Self Management of WSN, Social sensing WSN
	2 nd	Application of WSN , Wireless Multimedia sensor network, Wireless Nano sensor Networks
	3 rd	Underwater acoustic sensor networks , WSN Coverage
	4 th	Stationary WSN, Mobile WSN
	5 th	Revision
7 TH	1 st	5.M2M Communication: M2M communication
	2 nd	M2M Ecosystem
	3 rd	M2M service Platform
	4 th	Interoperability
	5 th	Revision
8 TH	1 st	Question Answer Discussion
	2 nd	Class Test
	3 rd	6.Programming with Arduino: Features of Arduino
	4 th	Components of Arduino Board
	5 th	Revision
9 TH	1 st	Arduino IDE
	2 nd	Case Studies
	3 rd	Question Answer Discussion
	4 th	7.Programming with Raspberry Pi: Architecture
	5 th	Revision
10 TH	1 st	Pin Configuration
	2 nd	Case studies
	3 rd	Case studies
	4 th	Implementation of IoT with Raspberry Pi
	5 th	Revision
11 TH	1 st	8.Software defined Networking: Limitation of current network, Origin of SDN
	2 nd	SDN Architecture
	3 rd	Rule Placement, Open flow Protocol
	4 th	Controller placement, Security in SDN , Integrating SDN in IoT
	5 th	Revision
12 TH	1 st	Question Answer Discussion
	2 nd	Class Test

	3rd	9.Smart Homes: Origin and example of Smart Home Technologies
	4th	Smart Home Implementation
	5 th	Revision
13TH	1st	Home Area Networks(HAN)(cont..)
	2nd	Home Area Networks(HAN), (Smart Home benefits and issues
	3rd	Question Answer Discussion
	4th	10.Smart Cities: Characteristics of Smart Cities, Smart city Frameworks
	5 th	Revision
14TH	1st	Challenges in Smart cities
	2nd	Data Fusion
	3rd	Smart Parking , Energy Management in Smart cities
	4th	11.Industrial IoT: IIoT requirements, Design considerations
	5 th	Revision
15TH	1st	Applications of IIoT , Benefits of IIoT
	2nd	Challenges of IIoT
	3rd	Question Answer Discussion
	4th	Final revision
	5 th	Final revision

Aditya Nanayan Jena

SIGNATURE OF LECTURER

Dilipkumar Sahoo

SIGNATURE OF H.O.D