

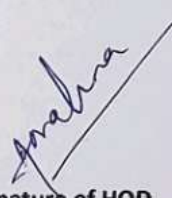
IOT COMMUNICATION TECHNOLOGY LESSION PLAN	
JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA	
Name of the Faculty: SABYASACHI SARANGI	Academic Year: 2026-27
Course No.: TH4	Course name: IOT COMMUNICATION TECHNOLOGY
Programe: Diploma	Branch: C.E&IOT
Year/Sem:5th	Section: NA
Course code: CEIPE 303	Credit: 3

Sl. No.	Period	Time (min)	Chept	Topic to be Covered	Teaching Method
1	1	60min	1.1	Overview of IoT Communication	Black board
2	2	60min	1.2	IoT Communication Requirements & Challenges	Black board
3	3	60min	1.3	IoT Communication Requirements & Challenges	Black board
4	4	60min	1.4	Types of IoT Networks: PAN, LAN, WAN	Black board
5	5	60min	1.5	IoT Communication Models & Protocols	PPT
6	6	60min	1.6	OSI Model and TCP/IP in IoT	PPT
7	7	60min	1.7	REVISION OF CHAPTERs	PPT
8	8	60min	2.1	Wi-Fi and Bluetooth in IoT	Black board
9	9	60min	2.2	ZigBee	Black board
10	10	60min	2.3	Z-Wave, and LoRaWAN	Black board

11	11	60 min	2.4	5G and Cellular IoT (NB-IoT,LTE-M)	Black board
12	12	60 min	2.5	RF Communication and Near Field Communication (NFC)	Black board
13	13	60 min	2.6	Comparative Analysis of Wireless IoT Technologies	Black board
14	14	60 min	2.7	REVISION OF CHAPTERs	Black board
15	15	60 min	3.1	MQTT (Message Queuing Telemetry Transport)	Black board
16	16	60 min	3.2	CoAP (Constrained Application Protocol)	PPT
17	17	60 min	3.3	HTTP and WebSockets for IoT	Black board
18	18	60 min	3.4	AMQP (Advanced Message Queuing Protocol)	Black board
19	19	60 min	3.5	Implementing MQTT and CoAP in IoT Applications	Black board
20	20	60 min	3.6	REVISION OF CHAPTERs	PPT
21	21	60 min	3.7	REVISION OF CHAPTERs	Black board
22	22	60 min	4.1	Edge Computing vs. Cloud Computing in IoT	Black board
23	23	60 min	4.2	IoT Gateways and Their Role in Communication	Black board
24	24	60 min	4.3	IoT Data Transmission to Cloud Platforms	PPT
25	25	60 min	4.4	Cloud-Based IoT Services	Black board
26	26	60 min	4.5	Real-time Data Streaming and Processing	Black board
27	27	60 min	4.6	REVISION OF CHAPTERs	Black board
28	28	60 min	4.7	REVISION OF CHAPTERs	Black board
29	29	60 min	4.8	REVISION OF CHAPTERs	Black board
30	30	60 min	5.1	Security Challenges in IoT Communication	Projector
31	31	60 min	5.2	Secure IoT Communication Protocols (DTLS, TLS, IPSec)	Black board
32	32	60 min	5.3	Secure IoT Communication Protocols (DTLS, TLS, IPSec)	Black board
33	33	60 min	5.4	Data Encryption in IoT Networks	Black board
34	34	60 min	5.5	Authentication Mechanisms for IoT Devices	Black board
35	35	60 min	5.6	REVISION OF CHAPTERs	Black board

36	36	60 min	5.7	REVISION OF CHAPTERs	Black board
37	37	60 min	5.8	REVISION OF CHAPTERs	Black board
38	38	60 min	6.1	Smart Cities and Smart Homes	Black board
39	39	60 min	6.2	Industrial IoT (IIoT) and Smart Manufacturing	Black board
40	40	60 min	6.3	IoT in Healthcare and Smart Agriculture	Black board
41	41	60 min	6.4	Vehicle-to-Everything (V2X) Communication	Black board
42	42	60 min	6.5	IoT Communication in Supply Chain and Logistics	Black board
43	43	60 min	6.6	REVISION OF CHAPTERs	Black board
44	44	60 min	6.7	REVISION OF CHAPTERs	Black board
45	45	60 min	6.8	REVISION OF CHAPTERs	Black board


Signature of Faculty


Signature of HOD