

BHADRAK ENGINEERING SCHOOL & TECHNOLOGY (BEST), ASURALI, BHADRAK

INTERNET OF THINGS (Th- 02)

CHAPTER WISE DISTRIBUTION OF PERIODS & EXPECTED MARKS

Sl. No.	Topics	Periods as per Syllabus	Periods actually needed	Expected Marks
01	Introduction to Internet of Things	06	06	10
02	Iot Networking	06	05	10
03	Connectivity Technologies	06	08	10
04	Wireless Sensor Networks	06	11	10
05	M2M Communication	06	04	10
06	Programming with Arduino	05	04	10
07	Programming with Raspberry Pi	05	03	10
08	Software defined Networking	06	04	10
09	Smart Home	05	02	10
10	Smart Cities	05	03	05
11	Industrial Iot	04	03	05
TOTAL		60	53	100

Sign of Lect.

Sign of HOD.

Sign of AIC

Sign of Vice Principal

LESSON PLAN

Discipline: Computer Science & Engg.	Semester: Fourth (4 th)	Name of the Faculty: Er Satabdi Palit
Subject: Operating System	No. of days/week class allotted: Six (6)	Semester from Date: 16.02.23 to Date: 23.05.23 No. of Weeks: 15
WEEK	CLASS DAY	THEORY TOPICS
1 st	1 st	Chapter No.- 1: Introduction to Internet of Things Introduction , Characteristics of IoT
	2 nd	Applications of IoT , IoT Categories
	3 rd	IoT Enablers and connectivity layers Baseline Technologies
	4 th	Sensor Actuator
	5 th	IoT components and implementation
	6 th	Challenges for IoT
2 nd	1 st	<i>Possible Question Answer Discussion</i>
	2 nd	Chapter No.- 2: IoT Networking Terminologies
	3 rd	Gateway Prefix allotment , Impact of mobility on Addressing
	4 th	Multihoming
	5 th	Deviation from regular Web
	6 th	IoT identification and Data protocols
3 rd	1 st	<i>Possible Question Answer Discussion</i>
	2 nd	Chapter No.- 3: Connectivity Technologies Introduction IEEE 802.15.4
	3 rd	ZigBee
	4 th	6LoWPAN
	5 th	RFID
	6 th	HART and wireless HART

4 th	1 st	NFC, Bluetooth, Z wave
	2 nd	ISA100.11.A
	3 rd	Continue
	4 th	Possible Question Answer Discussion
	5 th	Monthly Test- 1
	6 th	Chapter No.- 4: Wireless Sensor Networks Introduction Components of a sensor node
5 th	1 st	Continue
	2 nd	Modes of Detection , Challenges in WSN
	3 rd	Sensor Web
	4 th	Cooperation and Behavior of Nodes in WSN Self-Management of WSN
	5 TH	Social sensing WSN
	6 TH	Application of WSN
6 th	1 st	Continue
	2 nd	Wireless Multimedia sensor network Wireless Nano sensor Networks
	3 rd	Underwater acoustic sensor networks WSN Coverage
	4 th	Stationary WSN, Mobile WSN
	5 th	Possible Question Answer Discussion
	6 th	Chapter No.- 5: M2M Communication M2M communication M2M Ecosystem
7 th	1 st	M2M service Platform
	2 nd	Continue
	3 rd	Interoperability
	4 th	Possible Question Answer Discussion
	5 th	Monthly Test- 2

	6th	Chapter No.- 6: Programming with Arduino Features of Arduino
8th	1 st	Components of Arduino Board
	2 nd	Arduino IDE
	3 rd	Case Studies
	4 th	Possible Question Answer Discussion
	5th	Chapter No.- 7: Programming with Raspberry Pi Architecture and Pin Configuration
	6th	Case studies
9th	1 st	Implementation of IoT with Raspberry Pi
	2 nd	Possible Question Answer Discussion
	3 rd	Chapter No.- 8: Software defined Networking Limitation of current network , Origin of SDN
	4 th	SDN Architecture Rule Placement, Open flow Protocol
	5th	Controller placement , Security in SDN
	6th	Integrating SDN in IoT
10th	1 st	Possible Question Answer Discussion
	2 nd	Chapter No.- 9: Smart Home Origin and example of Smart Home Technologies Smart Home Implementation
	3 rd	Home Area Networks (HAN) Smart Home benefits and issues
	4 th	Monthly Test- 3
	5th	Chapter No.- 10: Smart Cities Characteristics of Smart Cities Smart city Frameworks Challenges in Smart cities
	6th	Data Fusion , Smart Parking
11th	1 st	Energy Management in Smart cities
	2 nd	Possible Question Answer Discussion

	rd 3	Chapter No.- 11: Industrial Iot IIoT requirements Design considerations
	th 4	Applications of IIoT, Benefits of IIoT
	5th	Challenges of IIoT
	6th	<i>Possible Question Answer Discussion</i>
12th	st 1	Review Class for Chapter No.- 01
	nd 2	Review Class for Chapter No.- 01
	rd 3	Review Class for Chapter No.- 02
	th 4	Review Class for Chapter No.- 02
	5th	Review Class for Chapter No.- 03
	6th	Review Class for Chapter No.- 03
13th	st 1	<i>Monthly Test- 4</i>
	nd 2	Review Class for Chapter No.- 04
	rd 3	Review Class for Chapter No.- 04
	th 4	Review Class for Chapter No.- 05
	5th	Review Class for Chapter No.- 05
	6th	Review Class for Chapter No.- 06
14th	st 1	Review Class for Chapter No.- 07
	nd 2	Review Class for Chapter No.- 08
	rd 3	Review Class for Chapter No.- 08
	th 4	Review Class for Chapter No.- 09
	5th	Review Class for Chapter No.- 09
	6th	Review Class for Chapter No.- 10
15th	st 1	Review Class for Chapter No.- 11
	nd 2	Review Class for Chapter No.- 11

	3 rd	Previous Year (S- 22) Question Answer Discussion
	4 th	Previous Year (S- 22) Question Answer Discussion
	5 th	Previous Year (S- 21) Question Answer Discussion
	6 th	Previous Year (S- 21) Question Answer Discussion

*Chapters covered up to IA: **1, 2 & 3.***