

# KIIT POLYTECHNIC, BHUBANESWAR

## LESSON PLAN

Session (2022 -2023)

<b>Discipline:</b> Computer Science & Engineering	<b>Semester:</b> 6th Summer /2023	<b>Name of the faculty:</b> Abhaya Kumar Panda <b>Email Id:</b> abhayafcs@kp.kiit.ac.in
<b>Subject:</b> Internet of Things Lab (Pr.2)	<b>No. of Days/week:</b> 02 (2 periods / Day)	<b>Start Date:</b> 13/02//2023 <b>End Date:</b> 23/05/2023

Week	Class Day	Practical Topics
1 <sup>st</sup>	1st	Introduction to Arduino, Arduino - Board Description
	2nd	Arduino- Installation
2 <sup>nd</sup>	1st	Understating basics of Arduino IDE
	2nd	Revision/Assessment class
3 <sup>rd</sup>	1st	Basics of C language using Arduino IDE, Variables, Datatypes
	2nd	Control statements
4 <sup>th</sup>	1st	Loops statements
	2nd	Functions
5 <sup>th</sup>	1st	Revision/Assessment
	2nd	Practical using Arduino-interfacing sensors
6 <sup>th</sup>	1st	Interfacing Light Emitting Diode (LED)- Blinking LED
	2nd	Revision/Assessment
7 <sup>th</sup>	1st	Interfacing Button and LED – LED blinking when button is pressed
	2nd	Revision/Assessment
8 <sup>th</sup>	1st	Interfacing Temperature Sensor (LM35)

	2nd	Revision/Assessment
9 <sup>th</sup>	1st	Interfacing Temperature and Humidity Sensor (DHT11)
	2nd	Revision/Assessment
10 <sup>th</sup>	1st	Interfacing Light Dependent Resistor (LDR) and LED, displaying automatic night lamp
	2nd	Revision/Assessment
11 <sup>th</sup>	1st	Interfacing Liquid Crystal Display (LCD) – display data generated by sensor on LCD
	2nd	Revision/Assessment
12 <sup>th</sup>	1st	Interfacing Air Quality Sensor-pollution (e.g., MQ135) – display data on LCD, switch on LED when data sensed is higher than specified value.
	2nd	Revision/Assessment
13 <sup>th</sup>	1st	Interfacing Bluetooth module (e.g., HC05)- receiving data from mobile phone on Arduino and display on LCD
	2nd	Revision/Assessment
14 <sup>th</sup>	1st	Interfacing Relay module to demonstrate Bluetooth based home automation application. (Using Bluetooth and relay).
	2nd	Interfacing Relay module to demonstrate Bluetooth based home automation application using Bluetooth and relay (Cont..).
15 <sup>th</sup>	1st	Revision/Assessment
	2nd	Revision/Assessment