KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN

Session (2023 -2024)

Discipline: Computer Science & Engineering	**Semester:** 6th Summer /2024	**Name of the faculty:** Abhaya Kumar Panda **Email Id:** abhayafcs@kp.kiit.ac.in
Subject: Internet of Things Lab (Pr.2)	**No. of Days/week:** 02 (2 periods / Day)	**Start Date:** 16/01/2024 **End Date:** 26/04/2024

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

	2nd	Revision/Assessment
9th	1st	Interfacing Temperature and Humidity Sensor (DHT11)
	2nd	Revision/Assessment
10th	1st	Interfacing Light Dependent Resistor (LDR) and LED, displaying automatic night lamp
	2nd	Revision/Assessment
11th	1st	Interfacing Liquid Crystal Display (LCD) – display data generated by sensor on LCD
	2nd	Revision/Assessment
12th	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
13th	1st	Interfacing Bluetooth module (e.g., HC05)- receiving data from mobile phone on Arduino and display on LCD
	2nd	Revision/Assessment
14th	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..).
15th	1st	Revision/Assessment
	2nd	Revision/Assessment