

## LESSON PLAN

<b>Discipline:</b> Computer Science & Engg.	<b>Semester:</b> Sixth (6 <sup>th</sup> )	<b>Name of the Lab I/C:</b> Mr Abinash Parida
<b>Subject:</b> Internet of Things Lab (Pr 2)	<b>No. of days/week class allotted:</b> Three (3)	<b>Semester from Date:</b> 16.01.24 to <b>Date:</b> 26.04.24 <b>No. of Weeks:</b> 15
<b>WEEK</b>	<b>CLASS DAY</b>	<b>PRACTICAL EXPERIMENTS</b>
1 <sup>st</sup>	1 <sup>st</sup>	Basics of C language using Arduino IDE
	2 <sup>nd</sup>	1. Understating basics of Arduino IDE 2. Variables, datatype, loops, control statement, function
	3 <sup>rd</sup>	Review Class
2 <sup>nd</sup>	1 <sup>st</sup>	Practical using Arduino-interfacing sensors Interfacing Light Emitting Diode (LED)- Blinking LED.
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
3 <sup>rd</sup>	1 <sup>st</sup>	Interfacing Button and LED – LED blinking when button is pressed
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
4 <sup>th</sup>	1 <sup>st</sup>	Interfacing Light Dependent Resistor (LDR) and LED, displaying automatic night lamp
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
5 <sup>th</sup>	1 <sup>st</sup>	Interfacing Temperature Sensor (LM35) and/or humidity sensor (e.g.DHT11).
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
6 <sup>th</sup>	1 <sup>st</sup>	Interfacing Liquid Crystal Display (LCD) – display data generated by sensor on LCD
	2 <sup>nd</sup>	
	3 <sup>rd</sup>	Review Class
7 <sup>th</sup>	1 <sup>st</sup>	Interfacing Air Quality Sensor-pollution (e.g. MQ135) – display data on LCD , switch on LED when data sensed is higher than
	2 <sup>nd</sup>	

		specified value.
	<sup>rd</sup> 3	Review Class
8 <sup>th</sup>	<sup>st</sup> 1	Interfacing Air Quality Sensor-pollution (e.g. MQ135) – display data on LCD , switch on LED when data sensed is higher than specified value.
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	Review Class
9 <sup>th</sup>	<sup>st</sup> 1	Interfacing Bluetooth module (e.g. HC05)- receiving data from mobile phone on Arduino and display on LCD
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	Review Class
10 <sup>th</sup>	<sup>st</sup> 1	Interfacing Relay module to demonstrate Bluetooth based home automation application. (using Bluetooth and relay).
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	Review Class
11 <sup>th</sup>	<sup>st</sup> 1	Review Class
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	
12 <sup>th</sup>	<sup>st</sup> 1	Review Class
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	
13 <sup>th</sup>	<sup>st</sup> 1	Review Class
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	
14 <sup>th</sup>	<sup>st</sup> 1	Review Class
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	
15 <sup>th</sup>	<sup>st</sup> 1	Review Class
	<sup>nd</sup> 2	
	<sup>rd</sup> 3	