PNS SCHOOL OF ENGG. & TECH., MARSHAGHAI LESSON PLAN BRANCH: CSE SEMESTER: NAME OF TEACHING FACULTY: ER. BALARAM DAS 6TH SUBJECT: IoT Lab NO. OF DAYS/ **SEMESTER FROM DATE: 04.02.2025 TO 17.05.2025** NO. OF WEEKS: 12 PER WEEK CLASS ALLOTTED: 2 WEEK CLASSDAY PRATICAL TOPICS 1ST Introduction to IoT. Arduino installation 2ND 1ST Basics of Arduino IDE 1ST Types of Arduino IDE Arduino kit 2ND 2ND Variables, data types, loops, 1ST control statement, function 3RD 2ND Interfacing Light Emitting Diode(LED)- Blinking LED 1ST 4th 2ND Interfacing Button and LED – LED blinking when button is pressed 1ST 2ND 5th Interfacing Light Dependent Resistor (LDR) and LED, displaying automatic night lamp 1ST 6th 2ND Interfacing Temperature Sensor(LM35) and/or humidity sensor (e.g.DHT11) 1ST 2ND 7th Interfacing Liquid Crystal Display(LCD) – display data generated by sensor on LCD 1ST 2ND 8th Interfacing Air Quality Sensor-pollution (e.g. MQ135) – display data on LCD, switch on LED when data sensed is higher than specified value. 1ST 2ND 9th Interfacing Bluetooth module (e.g. HC05)- receiving data from mobile phone 1ST on Arduino and display on LCD 10th 2ND Interfacing Relay module to demonstrate Bluetooth based home automation 1ST application. (using Bluetooth and relay). 2ND 11th Record checking and final submission. 1ST 12th 2ND

Signature of the H.O.D

Signature of the Demonstrator