

| Sr. No. | Practical Definition |
|------------|--|
| 1. | Study the functionality of Arduino Uno board and Arduino IDE |
| | 1. Installation of Arduino IDE with interface. (A) |
| | 2. Create a first program using Arduino IDE with Hardware Interface and without hardware |
| | interface. (A) |
| | 3. Demonstrate serial communication methods with Arduino. (A) |
| | 4. Write a program to perform Arithmetic operations. (A) |
| | 5. Write a program to determine whether a number is odd or even. (A) |
| | 6. Write a program to find the maximum number from 3 numbers. (A) |
| | 7. Write a program to print 1 to 10. (A) |
| | 8. Write a program to sum digits. (A) |
| | 9. Write a program to print a number in reverse order. (A) |
| | 10. Write a program to continuously print whether the number is even or odd using UDF. (A) |
| 2. | Introduction to Basic Electrical concepts with serial and parallel communication |
| | 1. Use of basic electrical concepts. (A) |
| e . | 2. Create series and Parallel connections to calculate the readings of total resistance. (A) |
| 3. | Digital Input of Arduino board with push button and switch |
| | 1. Blink an LED with Push Button using Arduino. (A) |
| 2 | 2. Blink an 2 LED using Switch. (A) |
| 4. | Digital Output of Arduino board with LED control |
| | 1. Blink an LED using Arduino. (A) |
| | 2. Blink an RGB LED using Arduino (All at a time). (A) |
| N. | 3. Perform a traffic light signal with Red, Yellow and Green LEDs. (A) |

Faculty: Prof. Asha A. Gondaliya Subject: IOT (2302CS522) Dept.: Computer Engg.