S.No.	Experiment / Exercise Title	Proposed No. of Sessions

INTERNET OF THINGS LAB (R20)

Course Code: 20IT6L02

Faculty: R Uma Aruna Devi

Date of Exam: 27/3/2024

Class: III B.Tech – IT

Semester: VI

Timings: 09:00AM To 4:00PM

LIST OF PROGRAMS

1 a) Familiarization with Arduino and perform necessary software installation.

b) To interface Push button/Digital sensor (IR/LDR) with Arduino and write a program to turn ON LE when push button is pressed or at sensor detection.

2 a) To interface Push button/Digital sensor (IR/LDR) with Arduino and write a program to turn ON LE when push button is pressed or at sensor detection.

b) To interface Bluetooth with Arduino and write a program to send sensor data to smart phone using Bluetooth

3 a) To interface Bluetooth with Arduino and write a program to send sensor data to smart phone using Bluetooth

b) To interface Stepper motor with Arduino and write a program to control the same using potentiometer

4 a) To interface Stepper motor with Arduino and write a program to control the same using potentiometer

b) Familiarization with Arduino and perform necessary software installation.

5 a) To interface LED/Buzzer with Arduino and write a program to turn ON LED for 1 sec after every 2 seconds.

b) To interface OLED with Arduino and write a program to print temperature and humidity readings it.

6 a) To interface OLED with Arduino and write a program to print temperature and humidity readings it.

b) To interface Bluetooth with Arduino/Raspberry Pi and write a program to turn LED ON/OFF when '1'/'0' is received from smart phone using Bluetooth

7 a) To interface Bluetooth with Arduino/Raspberry Pi and write a program to turn LED ON/OFF when '1'/'0' is received from smart phone using Bluetooth

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To 4:00PM

b) To measure temperature using thermocouple by interfacing it with Arduino

a) To measure temperature using thermocouple by interfacing it with Arduino

b) To interface LED/Buzzer with Arduino and write a program to turn ON LED for 1 sec after every 2 seconds.

m to turn ON LE

a) To interface DHT11 sensor with Arduino and write a program to print temperature and humidity readings

m to turn ON LE

b) To interface Servo motor with Arduino and write a program to control the same

mart phone using

a) To interface Servo motor with Arduino and write a program to control the same

mart phone using

b) To interface thermistor with Arduino for temperature measurement

using

a) To interface thermistor with Arduino for temperature measurement

using

b) Write a program to create TCP server on Arduino/Raspberry Pi and respond with humidity data to TCP client when requested

a) Write a program to create TCP server on Arduino/Raspberry Pi and respond with humidity data to TCP client when requested

1 sec after every

b) To interface DHT11 sensor with Arduino and write a program to print temperature and humidity readings

humidity readings

humidity readings

LED ON/OFF when

LED ON/OFF when