EXPERIMENT

BLUETOOTH—SMARTPHONE CONTROLLED LIGHT SYSTEM

CIRCUIT DIGRAM:

THEORY:

CONCEPT USED:

➢ KIRCHOFF'S VOLTAGE LAW ➢ KIRCHOFF'S CURRENT LAW ➢ CONCEPT OF BLUETOOTH AND ITS CONNECTION

LEARNING & OBSERVATION:

• CONNECTIONS IN BREADBOARD AND WIRING • TO FORM DIFFERENT PATTERNS FROM LEDS • HOW TO CONTROL ARDUINO & ITS CODING • SENSOR CONCEPTS WITH CONCEPTS OF BLUETOOTH

OBSERVATIONS:

❖ CONTROL OF BLUETOOTH WITH SMART PHONES ❖ RELATION BETWEEN SOFTWARE AND HARDWARE

PROBLEMS AND TROUBLESHOOTING:

✓ TO SELECT THE RIGHT PORT AND TYPE OF ARDUINO ✓ TO CHECK THE LOOSE CONNECTIONS ✓ TO CHECK THE CONTINUITY OF CIRCUIT ✓ TO CHECK THE FLOW OF CURRENT ✓ TO CHECK THE CONNECTIONS ACCORDING TO THE CODES ✓ TO CONNECT THE RIGHT PINS IN THEIR RESPECTIVE PINMODES ACCORDING TO THE CODES

PRECAUTIONS:

• HANDLE THE COMPONENTS CAREFULLY • AVOID CONNECTING ARDUINO TILL THE CIRCUIT IS COMPLETE • CONNECT THE LEDs WITH A RESISTANCE TO AVOID DAMAGE • DON'T PLUG THE COMPONENTS INTO UNKNOWN CIRCUITS AND MODES

SUBMITTED BY: NAME: TUSHAR SRIVASTAVA

UID : 19BCS6113

COURSE: BE-CSE(AIML-2A)