Course Project

Class: T Y B Tech

Course: Microprocessors and Microcontrollers AY: 2020-21

Q.1 Design and Develop an embedded application using 8-bit Microcontroller (Any vendor) to show the interfacing between Microcontroller development board and MATLAB with communication for following I/O devices/sensors.

1. LED

2. Switch/Button

3. 7-seg LED

4. 16x2 LCD/20x2 LCD

5. Solid State Relay

6. DC Motor

7. Temp Sensor (LM35,etc..)

8. Proximity switch

9. Buzzer

10. Potentiometer

It is expected that you should develop an application to demonstrate the connectivity (2-way) between MATLAB through customized GUI and Microcontroller development board and the interfacing devices/sensors.

The evaluation and the marks are based on the successful demonstration of number of devices listed above. Max. marks are 10.

Deadline: Before End of Semester, by Nov. 15, 2021