

CPE3331: Microprocessor Interfacing

Name: _____

Reg No: _____

Section: _____

Department of Electrical and Computer Engineering

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Islamabad, Pakistan

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S. N0	List of Experiments
1	Introduction to STM32F4 Micro-Controller, ARM Architecture and its Programming
2	STM32F4 GPIO Port familiarization using blinking LED example
3	Overview of ARM assembly programming and addressing modes
4	ARM assembly programming using Arithmetic Instructions
5	ARM assembly programming using control flow instructions
6	Keypad and Seven-Segment Display Interface with STM32F4
7	Liquid Crystal Display (LCD) Interface with STM32F4
8	Analog to Digital Convertor (ADC) Interface with STM32F4
9	General Purpose Timers in STM32F4 and their Programming
10	External Interrupts of STM32F4
11	PWM generation & Motor Speed control using STM32F4
12	Serial Communication interface in STM32F4
13	Open-Ended Lab
14	Open-Ended Lab

Lab Safety Rules and Regulations

Following rules and regulations must be followed by students during microprocessor lab.

- Be sure that all equipment is properly working before using them for laboratory exercises. Any defective equipment must be reported immediately to the Lab Engineer or Lab Technical Staff.
- Students should keep a safe distance from the circuit breakers, electric circuits, or any moving parts during the experiment.
- Avoid any part of your body being connected to the energized circuit and ground.
- Switch off the equipment and disconnect the power supplies from the circuit before leaving the laboratory.
- Make sure that the last connection to be made in your circuit is the power supply, and the first thing to be disconnected is also the power supply.
- Equipment should not be removed or transferred to any location without permission from the laboratory staff.
- Apply rated voltages to ICs used in digital designs.
- Do not remove oscilloscope probe tips. This may lead to damage to probe tips and sometimes electric shock.

Sign_____

Name: _____

Registration No: _____

Dated: _____