CET3014B: Microprocessor Architectures & Internet of Things

I N D E X

Sr. No.	Title	Page	Date	Signature of Batch I/C
1.	Study of IoT architecture,development platforms and various ARM SOCs such as Raspberry Pi/ESP8266 boards/Beagle board/Arduino Uno etc. To perform OS installation used to build IoT devices.			
2.	To interface sensors such as temperature or ultrasonic or gas sensors with Raspberry Pi/BeagleBone Black Board/TinkerCAD Arduino,etc and display readings on console.			
3.	To interface simple actuators such as DC/Servo/Stepper motor ,Relays etc with Raspberry Pi / BeagleBone Black Board/TinkerCAD Arduino Uno.			
4.	Consider a suitable scenario of traffic signaling inside a crossroads and demonstrate traffic control using Raspberry Pi/ Beaglebone Black Board/Tinker CAD Arduino Uno etc.			
5.	To stimulate an operation of obstacle detection and notifying it with a buzzer or LED using Raspberry Pi / Beaglebone Black Board/Tinker CAD Arduino Uno etc.			
6.	To sense the data from sensors and send it to the cloud system.			
7.	Write X86/64 ALP to add an array of N hexadecimal numbers.			
8.	Write X86/64 ALP to perform BCD to Hex and Hex to BCD conversion.			
9.	Write X86/64 ALP to display the contents of system registers GDTR, IDTR, LDTR, TR and MSW (Machine Status Word).			
10.	Write X86 Assembly Language Program (ALP) to simulate COPY command in ubuntu using file operations.			
11.	Write X86/64 ALP to perform sorting operations. (Ascending / Descending).			

CERTIFICATE

Certified that Mr./Ms. of Class **S.Y.B.Tech. (CSE)** Division Roll No._has completed the laboratory work in the subject Microprocessor Architectures & Internet of Things during the semester IV of the academic year **2022-23**.

Signature of the Faculty Seal of the Head of the School