BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT
Yelahanka, Bengaluru.

Department of Information Science & Engineering

ISE Dept. *Transform Here*

Date: 23-06-21

Syllabus for IA-2

Course Name: Microcontroller & Embedded Systems **Course Code: 18CS44**
Course In charge: Dr. Narasimha Murthy M S **No of Credits: 3**

ASSIGNMENT-1

Course Outcomes

CO1: Understand the architectural features and instructions of ARM microcontroller and RTOS for Embedded applications
CO2: Apply ARM instructions set to program different applications and Interface external devices and I/O with ARM microcontroller.
CO3: Use the basic hardware components and their selection method based on the characteristics and attributes of an embedded system.
CO4: Employ the fundamental concepts of hardware/software co-design approaches in writing firmware for various hardware devices

Note:
I. Answer all the questions on A4 Size sheet only
II. Answer scripts should be uploaded in Google Class Room
III. Write the answers neatly and it should be legible
IV. Last Date to submit the assignment is 27-06-2021

Q1. Explain Processor Status Register Instructions along with their purpose
Q2. Explain with example Coprocessor Instructions used in ARM
Q3. List and explain various characteristics of Embedded System
Q4.Bring out the major application area of Embedded Systems
Q5.Bring out the main purpose of Embedded Systems
Q6. With neat diagram explain the Core of Embedded Systems
Q7. Differentiate between Big Endian and Little Endian notations
Q8.Comapare (i) CPLDs Vs FPGAs and (ii) FPGAs Vs ASIC
Q9. Differentiate between SRAM and DRAM
Q10. Write a note on Actuators and Sensors used in Embedded Systems in various applications.

Faculty In charge
1. Dr.Narasimha Murthy M S (4A and 4C)
2. Dr.Shridhar Sanshi (4B)