**Amrita Vishwa Vidyapeetham**

**Amrita School of Engineering, Coimbatore**

**Department of Electrical and Electronics Engineering**

**Lab Plan**

Academic year: ***2021-22*** Semester : *I*

Department : *Electrical & Electronics Engineering* Programme : *M Tech Embedded Systems*

Course Code : 21ES602 Course Title : *Embedded System Design Using ARM*

**Lab Experiments: (10 Experiments – 20 marks)**

1. Familiarization of IDE
2. Assembly Language Programs to understand instruction set (Practice)
3. **Assembly Language Programs to understand instruction set**
4. **Assembly Language Programs to understand instruction set**
5. **Embedded C Program to configure and use Input/output ports**
6. **Embedded C Program to configure and use Timers ---OVERFLOW**
7. **Embedded C Program to configure and use ADC**
8. **Embedded C Program to configure and use DAC**
9. **Embedded C Program to configure and use PWM**
10. **Embedded C Program to configure and use UART**
11. **Embedded C Program to configure and use SPI**
12. **Embedded C Program to configure and use I2C**
13. **Project – 10 marks**