

# ***B. N.M. Institute of Technology***

An Autonomous Institution under VTU

**Department of Computer Science Engineering**

**Microcontroller and Embedded System(22CSE142)**

## **Question Bank**

### **Module 3**

1. Construct/Develop an ALP to find the sum of N integers stored in an array. The result is stored in internal RAM.
2. Construct/Develop an ALP to find the smallest number in a array.
3. Construct/Develop an ALP to find the Largest number in a array.
4. Construct/Develop an ALP to sort the array in ascending order.
5. Construct/Develop an ALP to sort the array in descending order.
6. Construct/Develop an ALP to count the number of ones and zeroes in a given number.
7. Construct/Develop an ALP to move a block of data from source to destination locations.
8. Construct/Develop an ALP to exchange a block of data of source1 and source2 locations
9. Construct/Develop an ALP to check whether the given number is even or odd number.
10. Construct/Develop an ALP to find the GCD of a given number.
11. Write a C code and it's corresponding assembly code to print the squares of the integer 0 to 9.
12. With an example show how to call a subroutine from an assembly routine.(Example of printf as a subroutine from C Libraries)
13. Write the sumof() in assembly routine.
14. Explain the need of profiler and Cycle counter.