17/12/22 Lib

Exam.Code:0929 Sub. Code: 6596

2122

B.E. (Electronics and Communication Engineering) Fifth Semester

EC-506: Advanced Microcontrollers and Applications

Time allowed: 3 Hours Max. Marks: 50

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

- I. Attempt the following:
 - a) Examples of sophisticated embedded systems
 - b) MUL and DIV instruction
 - c) Role of timer
 - d) IP core
 - e) Role of aecelerometer

(5x2)

UNIT-I

- II. Define Embedded System. What are the characteristics of Embedded Systems?
- III. Explain the essential peripheral circuits for 8 bit microcontroller, (10)
- IV. Compare different microcontrollers used for embedded system designing. (10)

UNIT - II

- V. Explain the working and pin architecture of open source embedded development board using block diagram. (10)
- VI. Briefly explain the concept of input and output port of Embedded development board.

 Also write a program for Serial port interfacing (10)
- VII. Explain functional blocks of gesture control robot. (10)