AC-3071
Second Year B. Sc. (Sem. IV) Examination
April / May – 2015
Electronics For CS : Paper - III
(Embedded System)

Time : 2 Hours] [Total Marks : 50

Instruction:

1 Answer in short :

(a) Give the long form of CLPA, AND, ADD, ANL A, @RO
(b) Explain following instruction:-SWAP, XCHD, XRL, XCH
(c) What is Program counter( PC )?
(d) What is a Flag w.r.t 8051? Which are they?

2 (a) How many instruction types are there in 8051 instruction set?
(b) General architecture of MICROCONTROLLER.

OR

(a) What do you understand by addressing mode in 8051? How many addressing modes are there in 8051 controller?
(b) Architectural block diagram of 8051.
3  Short notes on :- *(any two)*
   (a) Differentiate between Microprocessor and Microcontroller.
   (b) PROGRAM counter(PC) and STACK POINTER (SP) of microcontroller
   (c) PIN Diagram of 8051
   (d) Microcontroller timer and counter.

4  Write programme : *(any two)*
   (a) Write a program to toggle all the bit of ports P0 and P1 continuously such that P0=FFH, and P0=00 and vice-versa
   (b) Create a pulse having width of 5ms on P 1.5 using timer 0.
   (c) Write program to read a from P0 and send it to port P1, if it is less than 50 otherwise send it to P2.
   (d) Write program to calculate the checksum byte for the given data of four byte.