AC-3065
Second Year B. Sc. (Sem. IV) Examination
April / May – 2015
Applied Electronics : Paper - III
(Embedded System)

Time : 2 Hours] [Total Marks : 50

Instruction :

1 Answer in short :
   (a) Give the long form of AND, ADD, CJNE, ANL A.
   (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.

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[Contd...
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 P1.5 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 add and subtract.