



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 :

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| <p>नीचे दृशायेव निशानीवाणी विगतो उत्तरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : SECOND YEAR B. SC. (SEM. IV)</p> <p>Name of the Subject : APPLIED ELECTRONICS : PAPER - III</p> <p>Subject Code No. : 3 0 6 5 Section No. (1, 2,.....): Nil</p> | <p>Seat No. : <input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/><input type="text"/></p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin-top: 10px;">Student's Signature</div> |
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- 1 Answer in short : 8
 - (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 ? 7
(b) General architecture of MICROCONTROLLER. 7

OR

- (a) What do you understand by addressing mode in 8051? How many addressing modes are there in 8051 controller? 7
(b) Architectural block diagram of 8051. 7

- 3 Short notes on :- (any two) 14
 - (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)**

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- (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 add and subtract.
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