## VITHALBHAI PATEL & RAJRATNA P.T. PATEL SCIENCE COLLEGE

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|--|---|--|-----|----------------------------------|----------|
| VALLABH VIDHYA NAGAR                                   |   |  |     |                                  |          |
| T.Y. B.Sc. SEM: IV INTERNAL TEST                       |   |  |     | DATE: 03 <sup>th</sup> Oct. 2013 |          |
|  | SUB: ELECTRONICSTIME: 3:30 pm to 5:00   |  |     |                                  |          |
|  | CODE: US05CELE03 TOTAL MARKS: 30  |  |     |                                  |          |
| Q. 1   |   |  |     |                                  | [06]     |
| (1)  |   | 5 is pin chip.                                 |     |                                  |          |
|  | (A)   | 12   | (C) | 24                               |          |
|  | (B)   | 40<br>Section of 8085 decode instruction machi | (D) | None of above                    |          |
| (2)  |   |  |     |                                  |          |
|  | (A)   | Accumulator                                    | (C) | ALU                              |          |
| 1000000  | (B)   | Instruction decoder                            | (D) | None of above                    |          |
| (3)  |   | owing are control signal of 8085               |     |                                  |          |
|  | (A)   | $S_0$ and $S_1$                                | (C) | WR and RD                        |          |
|  | (B)   | RESET OUT                                      | (D) | None of above                    | P. Scien |
| (4)  |   | is data transfer instruction.                  |     | 121                              | 100      |
|  | (A)   | JMP  | (C) | ADI // w /                       | 15       |
|  | (B)   | MVI  | (D) | None of above                    | BRARY () |
| (5)  | An ii   | nstruction consist of                          |     |                                  | : 0      |
|  | (A)   | Machine code                                   | (C) | Binary code                      | *//      |
|  | (B)   | Op code and Operand                            | (D) | None of above                    | Nago     |
| (6)  |   | is machine control instruction.                |     | 2                                |          |
|  | (A)   | JMP  | (C) | XRI                              |          |
|  | (B)   | HLT  | (D) | None of above                    |          |
| (1)<br>(2)<br>(3)<br>(4)<br>(5)<br>(6)                 | List pins of interrupt control section of 8085.<br>State function of ALU.<br>Define 2-bytes instructions.<br>State characteristics of logical instructions.<br>Differentiate between assembly language and machine language program.<br>What is a logical instruction? State difference logical instructions. |  |     |                                  |          |
| Q.3  | Draw block diagram of 8085 system and briefly discuss function of important sections of it.   |  |     |                                  | [06]     |
|  | OR  |  |     |                                  |          |
| Q.3  | Define bus timing. Discuss concept of bus-timing with necessary diagram.  |  |     |                                  | [06]     |
| Q.4  | Discuss the method of writing assembling and executing a program in 8085 giving and example.  |  |     |                                  | [06]     |
| OR   |   |  |     |                                  |          |
| Q.4  | Discuss classification of different instructions according to word size giving necessary [06] illustration.   |  |     |                                  |          |
| Q.5  | Describe different arithmetic instructions of 8085 giving example of each.<br>OR  |  |     |                                  | [06]     |
| Q. 5   | (A) Write a program to load two hex-decimal number 8B H and 6F H in two different [04] registers. Now increment the content of first register by one than add these numbers and display final sum at output PORT 1.   |  |     |                                  |          |
|  | (B) Register B has 65 H and the accumulator has 97 H. Write instruction to subtract the [02] content of reg. B from Accumulator. Indicate the flag status of result.  |  |     |                                  |          |
|  |   |  |     |                                  |          |
|  |   |  |     |                                  |          |

- : All the best: -