A-3004
Second Year B. Sc. (Sem. III) Examination
March / April - 2015
Electronics for Computer Science : Paper - IV
(Microprocessor 8085)

Time : Hours] [Total Marks : 50

Instructions :
(1) Fill up strictly the details of signs on your answer book.
Name of the Examination : S.Y. B.S.C. (SEM. 3)
Name of the Subject : ELECTRONICS FOR COMPUTER SCIENCE : PAPER - IV
Subject Code No. : 3 0 0 4 Section No. (1, 2, ..., ) : NIL

(2) Figure on the right indicates full marks
(3) All symbols and abbreviations have their usual meaning.
(4) Non-programmable calculators are allowing.
(5) Q.1 is compulsory.
(6) Assume data if necessary.

1 Answer in short: 8
   (a) What is a stack top ?
   (b) What are the various flags used in 8085 ?
   (c) Explain : (i) SUB M (ii) HLT.
   (d) Which interrupt has the highest priority ?

2 (a) What do you understand by maskable and non-maskable interrupt ? 10
   (b) Explain the following instructions : 4
       (i) LDA 2000H (ii) RRC (iii) NOP (iv) INR C
       OR

2 (a) What are different operating modes of 8255 ? 10
   Explain mode 1 of its operation in detail.
   (b) Explain the 8253 control word format. 4

A-3004] 1 [Contd...
3. (a) Explain the function of the following pins of 8085 µP: 10
   (i) AD<sub>0</sub> – AD<sub>7</sub>  (ii) ALE  (iii) Ready
   (iv) INTR  (v) HOLD

   (b) Explain the terms: T-state, Machine cycle. 4

   OR

3. (a) How do the instructions of 8085 is classified based on their function? Give an example. 10

   (b) Write a program to add two numbers of 8-bit each. 4

4. Write short notes on: (any two) 14
   (a) Arithmetic group instruction set
   (b) Difference between a JMP and a CALL instruction
   (c) The 8255 control word format
   (d) Subroutine.