* D M M - 3 0 6 2 *

DMM-3062

Second Year B. Sc. (Sem. IV) Examination

March / April - 2016

Electronics : Paper - IV

Time : Hours] [Total Marks : **50**

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **SECOND YEAR B. SC. (SEM. 4)**

Name of the Subject :

☛ **ELECTRONICS : PAPER - 4**

☛Subject Code No. : **3 0 6 2** ☛Section No. (1, 2,.....) : **Nil**

Seat No. :

Student's Signature

(2) Q. 1 is compulsory.

(3) Abbreviations have their usually meaning.

1 Answer in Brief : 8

(A) Explain instructions MOV M, r and LXI H, Addr

(B) What do you understand by interrupt? State all interrupts available with 8085A and state their priorities.

(C) What is the bus width of data bus and address bus in case of 8085A? What is the maximum unique memory location accessible in 8085A?

(D) What is the function of ALE pin in case of 8085A?

2 14

(A) Write a program to add two 8-bit numbers and assume that the result is 8-bit only.

(B) Write a program to find 1's complement and 2's complement of 8-bit data.

OR

2 14

(A) Explain, in detail, the architecture of 8085A.

(B) Explain, in detail, the function of HOLD and HLDK pin of 8085A with reference to other master like direct memory access controller.

3 14

(A) Write a program to subtract two 8-bit numbers and assume that the result is 8-bit only.

(B) Write a program to find largest number from the three given numbers stored at some memory location.

OR

3 14

(A) What do you understand by Stack and Stack pointer? Explain the register structure of 8085A.

(B) What do you understand by addressing mode? With suitable examples explain, in detail, all addressing mode of 8085

4 14

(A) Write a program to add two decimal numbers and assume that the result can be more than 8-bit.

(B) Draw the functional block diagram of 8255 Programmable Peripheral Interface and explain function of each block.

OR

4 14

(A) Draw the functional block diagram of the 8085A and explain the function of each block.

(B) Draw block diagram of Flag register of 8085A and explain each flag in detail.
