Reg. No. ☐☐☐☐☐☐☐☐☐☐

**ELH 403**

## First Semester M.Sc. Degree Examination, Dec. 2018/Jan. 2019
## ELECTRONICS
### (Microprocessor and Microcontrollers)

Time : 3 Hours

Max. Marks : 70

### PART – A

**Note** : Answer **all** questions.

(2×5=10)

1. a) How to set 8051 in power down mode ?

   b) List the mode of operation in 8086.

   c) Write some example of advanced processor.

   d) What is the need for LOCK SIGNAL ?

   e) How DMA operation is performed in 8086 ?

### PART – B

**Note** : Answer the following :

(20×3=60)

2. a) Explain the working of 8086 with a neat architecture.  **10**

   b) Write a program to convert Binary to BCD using 8086 processor.  **10**

   OR

3. a) Explain stack and PSW register with example in 8086.  **10**

   b) Explain loop and call instruction with an example in 8086.  **10**

4. a) Explain with internal architecture of 80286/80386.  **10**

   b) Explain memory management concept virtual memory and segmentation scheme.  **10**

   OR

5. a) Describe the interrupts of 8086 and its types.  **10**

   b) Write a program to display HAPPY after every 2 sec using 8086 and LED display.  **10**

6. a) Describe the ports with circuits in 8051.  **10**

   b) Interface ADC converter with 8051 microcontroller and show its operation.  **10**

   OR

7. a) Describe the architecture of 8051 in detail.  **10**

   b) Write a program to generate a square waveform using 8051 controller.  **10**

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