Roll No ....

EX-502 (GS)

B.E. V Semester

Examination, December 2017

Grading System (GS)

Microprocessor and Microcontroller

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) Each question carries equal marks.

1. a) Explain the salient features of 8086, 80286 and 80386. 7
   b) Draw the pin diagram of 8086 CPU with its control signals. 7

2. a) Explain the instruction set of 8086 microprocessor. 7
   b) Discuss the various addressing modes of 8086 microprocessor. 7

3. a) Draw the block diagram of 8257 DMA controller and explain its operations. 7
   b) Draw the block diagram and explain the operations of 8255 parallel communication interface. 7

4. a) Explain about I/O Interfacing and memory interfacing with 8086. 7
   b) With neat block diagram explain the functions of 8251. 7

5. a) With neat block diagram explain PPI. 7
   b) With example explain the different instruction set of 8051 microcontroller. 7

6. a) Write an 8051 ALP to run the stepper motor in both forward and reverse direction with delay. 7
   b) Write notes on 8051 serial port programming. 7

7. a) Draw and explain the ADC interfacing using 8051. 7
   b) Explain the data types and assembler directives of 8051. 7

8. a) Define interrupt and their two classes? Write in detail about interrupt service routine? 7
   b) Explain Data transfer, arithmetic and branch instructions? 7

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