Roll No.....

National Institute of Technology, Delhi

Name of the Examination: B. Tech.

End-Semester Examination, 2019

Branch	**: EEE**	**Semester**	**: 5th**
Title of the Course	**: Introduction to Microprocessors and Interfacing**	**Course Code**	**: EEB 303**
Time: 3 Hours		**Maximum Marks: 50**	

Section A

1x10=10

Q1. All questions are compulsory.

(a) Give the number of address and data lines in 8086.
(b) What is NMI in 8086?
(c) What is the purpose of CLR command?
(d) Define the concept of MN/$\overline{MX}$ in 8086.
(e) Mention the types of programmed data transfer.
(f) What are the main types of interrupts?
(g) Give two examples of direct and register addressing modes.
(h) What is the function of 1, 20 and 40 number pins in 8086?
(i) Give the name of addressing mode for – MOV A, B.
(j) Define the vector interrupt.

Section B

5x4=20

Attempt any complete four questions.

Q2(a) Write a program to find the lowest number out of the given set of numbers.

(b) The address capability of 8086 is 1MB. Explain it how?

Q3(a) Write a program to find the highest number out of the given set of numbers.

(b) What is the memory segmentation in 8086. Explain it how?

Q4(a) What do you mean by Cycle stealing?

(b) Explain the work of all status pins in 8086.

Q5(a) What do you mean by DMA data transfer.

(b) Give the index and register indexed addressing modes.

Q6(a) Write a program to generate a square waveform using interfacing.

(b) Explain 8255 with its block diagram and working.

Section C

Attempt any complete two questions. 2x10=20

Q7. Draw and explain the programmed data transfer schemes for 8086.

Q8. What do you mean by 8259? Explain it with block diagram.

Q9. What do you mean by addressing modes in 8086? Explain with types.