Roll No. $\square$
Total No. of Questions : 09
B.Tech(Electrical Engineering \& Industrial Control) (2012 Onwards)
B.Tech (EE)(Electrical \& Electronics)/(Electronics \& Electrical)
(2011 Onwards)/B.Tech(EE)PT
(Sem.-5)
MICROPROCESSORS
Subject Code : BTEE-503
M.Code : 70556

Time: 3 Hrs.
Max. Marks : 60

## INSTRUCTION TO CANDIDATES:

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

## SECTION-A

1. Answer briefly :
a) What are the functions of ALE HOLD and HLDA Signals?
b) What is the difference between minimum and maximum mode of 8086 ?
c) Give the difference between features of 8085 and 8086 microprocessors.
d) Give the use of Push and pop instructions.
e) What is the function of LDA and STA instruction?
f) Define Machine cycle, $T$ state and instruction cycle.
g) What is the Memory segmentation?
h) What is the use of subroutine?
i) What are the functions of flags in microprocessors?
j) What is the difference between bi-directional I/O and strobed I/O?

## SECTION-B

2. Differentiate memory mapped I/O and peripheral mapped I/O in case of 8085 microprocessor.
3. Classify and explain different types of 8086 instructions with examples.
4. What do you mean by directives? Discuss any three assembler directives.
5. What do you mean by the addressing mode? Explain the various addressing modes of 8085 in detail with the help of examples.
6. Write a program to find the smallest number in a given data.

## SECTION-C

7. a) Write a program to add multibyte data.
b) Draw the flowchart to find the biggest value from given set of data.
8. Discuss in detail about the interrupts and interrupt service routine with interrupt cycle of 8085.
9. Explain the block diagram of 8279 keyboard interface and its operation.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

