C. U. SHAH UNIVERSITY
Winter Examination-2022

Subject Name : Advanced Micro-Processors

Subject Code : 4TE05AMP1   **Branch: B.Tech (CE)**

Semester : 5   **Date : 25/11/2022**   **Time : 02:30 To 05:30**   **Marks : 70**

Instructions:
  (1) Use of Programmable calculator & any other electronic instrument is prohibited.
  (2) Instructions written on main answer book are strictly to be obeyed.
  (3) Draw neat diagrams and figures (if necessary) at right places.
  (4) Assume suitable data if needed.

Q-1   **Attempt the following questions:**   **(14)**
  a) AC is known as_____
  b) What is instruction pointer?
  c) How many bytes of instruction STA 2000?
  d) Explain instruction : LHLD
  e) True/False: Data transfer groups of instructions does not affect the flag.
  f) Which is non maskable in 8085 processor?
  g) The Intel 8086 microprocessor is a _____ bit processor.
  h) Define : Assembler Directive
  i) What is the size of each segment in 8086?
  j) What is pipelining?
  k) Explain assembler directive : DW
  l) How physical address (PA) is calculated in 8086?
  m) Does 80386 processor supports the protection mechanism? Yes/No
  n) What is used of barrel shifter in 80386 processor?

Attempt any four questions from Q-2 to Q-8

Q-2   **Attempt all questions**   **(14)**
  A   What is addressing modes? Explain various addressing modes of 8085   **07**
            microprocessor.
  B   Draw and explain flag register of 8085.   **07**

Q-3   **Attempt all questions**   **(14)**
  A   Draw the internal architecture of 8085 microprocessor.   **07**
  B   Explain instructions (with example) of 8085 microprocessor: **07**
            LDA, ANI, CMP

Q-4		**Attempt all questions**	**(14)**
	A	What is memory bank? Explain 8086 memory banking with diagram.	**07**
	B	Draw pin diagram of 8086 microprocessor. Explain maximum mode related pins.	**07**

Q-5		**Attempt all questions**	**(14)**
	A	Draw and explain internal architecture of 8086 microprocessor.	**07**
	B	Explain address and data demultiplexing in 8086 processor	**07**

Q-6		**Attempt all questions**	**(14)**
	A	Write ALP to mask the lower 4 bit of the content given by memory location 2000 H	**07**
	B	Write ALP to subtract two 32 bit numbers in 8086 microprocessor.	**07**

Q-7		**Attempt all questions**	**(14)**
	A	Explain LDT and GDT	**07**
	B	Explain block diagram of 80386 microprocessor.	**07**

Q-8		**Attempt all questions**	**(14)**
	A	Explain the features of Pentium MMX and Core to Duo processor.	**07**
	B	Compare RISC with CISC.	**07**