

10EC62

(08 Marks)

(06 Marks)

(06 Marks)

USN

a. List the different registers in 80386.

c. List the features of 80386 processor.

b. Explain basic features of Pentium processor.

Sixth Semester B.E. Degree Examination, June/July 2018 Microprocessors

Time: 3 hrs.		s. Max. Marks: 100	
N	ote:	Answer any FIVE full questions, selecting at least TWO questions from	n each part.
		$\underline{PART - A}$	
1	a. b.	Draw the internal architecture of the 8086 and explain. What is addressing mode? Explain the different addressing mode of 8086? with examples.	(10 Marks) Explain each (10 Marks)
2	a.	Explain the following instructions:	
	1	i) LEA (ii) IDIV iii) DAA iv) JNGE v) SHR.	(10 Marks)
	b.	Explain various instruction formats used in 8086 with suitable example.	(10 Marks)
3	a.	Explain the following instructions with examples:	
		i) MOVS B ii) CMPS B iii) SCAS B iv) repeat prefix (REP) v) LODS	S. (10 Marks)
	b.	Write a 8086 procedure to convert packed BCD Number in AL to ASCII equi	valent in AX.
			(06 Marks)
	C.	Compare procedure and macro.	(04 Marks)
4	a.	Explain atleast FIVE dedicated interrupts in 8086.	(10 Marks)
	b.	What are hardware interrupts of 8086? Write the interrupt priority of 8086.	(05 Marks)
	C.	Explain the software interrupt operation of 8086.	(05 Marks)
		PART – B	
5	a.	Write a keyboard procedure that scans the keyboard (4×4 matrix) and returns	with numeric
		code of the key in AL.	(10 Marks)
	b.	Explain the interfacing of a steppermotor to 8086 with necessary circuit diagrams.	ram. Write an
		ALP to rotate the stepper motor clockwise by one complete rotation and ant	
		one complete rotation.	(10 Marks)
6	a.	Explain the data types of Numeric data processor 8087.	(10 Marks)
	b.	Explain the function of the following instructions:	
		i) FCOMP ii) FENI iii) FDECSTP iv) FSTENV v) FYL2XP1	(10 Marks)
7	a.	With a block diagram, explain the maximum mode of operation of 8086.	(10 Marks)
,	b.	Write a note on USB.	(10 Marks)