GPCET
Pioneering Innovative Education

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY
III B.Tech II Sem., I MID Subjective Exam
Branch: ECE & EEE

SET 1

SUB: MPMC   **Date: 28-02-2018**
TIME: 90Min   **Max Marks: 30M**

Question 1 is compulsory. Any one from 2 or 3 & 4 or 5

Q. NO		QUESTION	MARKS	UNIT	CO	COGNITIVE LEVEL
1)	A)	Outline the functions of BIU in 8086?	2	1	C311.1	Remember
	B)	Differentiate between minimum and maximum mode	2	1	C311.1	Analyze
	C)	Give any four pin definitions for the minimum mode.	2	1	C311.1	Understand
	D)	Write a program to add a data byte located at offset 0500H in 2000H segment to another data byte available at 0600H in the same segment and store the result at 0700H in the same segment.	2	2	C311.2	Apply
	E)	Define addressing mode.	2	2	C311.2	Remember
2(A)		Assume DS=2100H, BX=0158, DI=10A5h.Obtain Physical Address for the following cases i)MOV AL,[1B57] ii) MOV AL,[BX] iii) MOV AL,[BX+5] iv) MOV AL,[BX+DI] v) MOV AL,[BX+DI+5]	5	1	C311.1	Analyze
2(B)		Discuss the segment memory concept used in 8086.	5	1	C311.1	Understand
3		Describe the architecture of 8086 microprocessor with neat diagram.	10	1	C311.1	Understand
4(A)		Write an 8086 ALP to find the sum of numbers in the array of 10 elements?	5	2	C311.2	Apply
4(B)		Explain about unconditional branch instructions in 8086.	5	2	C311.2	Understand
5		Infer the various addressing modes of 8086 microprocessor with examples?	10	2	C311.2	Apply

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY
III B.Tech II Sem., I MID Subjective Exam
Branch: ECE & EEE

SET 2

SUB: MPMC
TIME: 90Min

Date: 28-02-2018
Max Marks: 30M

Question 1 is compulsory. Any one from 2 or 3 & 4 or 5

Q. NO		QUESTION	MARKS	UNIT	CO	COGNITIVE LEVEL
1)	A)	What is the operation of S0, S1 and S2 pins in maximum mode?	2	1	C311.1	Understand
	B)	Draw the bus request and bus grant timings in minimum mode system.	2	1	C311.1	Apply
	C)	Discuss about a subroutine program?	2	2	C311.2	Understand
	D)	Explain XLAT instruction?	2	2	C311.2	Understand
	E)	What are macros?	2	2	C311.2	Apply
2)		With neat diagram Illustrate the pin diagram of 8086 microprocessor.	10	1	C311.1	Apply
3(A)		Explain the register organization of 8086 microprocessor	5	1	C311.1	Understand
3(B)		Describe how 8086 access a byte or word from even & odd memory banks.	5	1	C311.1	Understand
4		Analyze the various addressing modes of 8086 microprocessor with examples?	10	2	C311.2	Apply
5(A)		Define PUSH and POP instruction with example.	5	2	C311.2	Understand
5(B)		Write an ALP to find the largest number in the array 52H, 23H, 56H, 45H, 72H, 18H	5	2	C311.2	Apply

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY
III B.Tech II Sem., I MID Subjective Exam
Branch: ECE & EEE

SET 3

SUB: MPMC
TIME: 90Min

Date: 28-02-2018
Max Marks: 30M

Question 1 is compulsory. Any one from 2 or 3 & 4 or 5

Q. NO		QUESTION	MARKS	UNIT	CO	COGNITIVE LEVEL
1)	A)	List the functional parts of 8086 CPU?	2	1	C311.1	Remember
	B)	How is the physical address calculated? Give an example	2	1	C311.1	Apply
	C)	What are the advantages of segmented memory?	2	1	C311.1	Understand
	D)	Define assembler and assembler directives?	1	2	C311.2	Understand
	E)	Give an examples for indirect addressing mode and based indexed addressing modes?	1	2	C311.2	Analyze
2)		Analyze the architecture of 8086 microprocessor with neat diagram.	10	1	C311.1	Analyze
3(A)		Draw and explain the minimum mode read and write timing diagrams.	5	1	C311.1	Apply
3(B)		Write short notes on interrupts of 8086.	5	1	C311.1	Apply
4(A)		Differentiate Procedure and Macro with examples.	5	2	C311.2	Analyze
4(B)		Write an ALP in 8086 for Multibyte addition of two 48-bit numbers.	5	2	C311.2	Create
5(A)		Describe following instructions of 8086 with example: (i) STOS. (ii) TEST. (iii) ROL. (iv) CMC.	5	2	C311.2	Understand
5(B)		Write an ALP for conversion of BCD to ASCII code in 8086.	5	2	C311.2	Apply

G.PULLAIAH COLLEGE OF ENGINEERING & TECHNOLOGY
III B.Tech II Sem., I MID Subjective Exam
Branch: ECE & EEE

SET 4

SUB: MPMC **Date: 28-02-2018**
TIME: 90Min **Max Marks: 30M**

Question 1 is compulsory. Any one from 2 or 3 & 4 or 5

Q. NO		QUESTION	MARKS	UNIT	CO	COGNITIVE LEVEL
1)	A)	Draw the format of 8086 flag register	2	1	C311.1	Apply
	B)	What is NMI (Non-Maskable Interrupt)?	2	1	C311.1	Understand
	C)	Compare Procedure & Macro.	2	2	C311.2	Analyze
	D)	Write an ALP for factorial of a number?	2	2	C311.2	Apply
	E)	How constants are declared?	2	2	C311.2	Understand
2(A)		Draw and explain the Maximum mode read and write timing diagrams.	5	1	C311.1	Apply
2(B)		Discuss about interrupt vector table in 8086.	5	1	C311.1	Understand
3(A)		Explain the functions of following pairs of pins in 8086. i) HOLD & HLDA ii) QS0 & QS1 iii) INTR & INTA'	5	1	C311.1	Understand
3(B)		Illustrate in detail about flag register of 8086 microprocessor.	5	1	C311.1	Apply
4		Describe the String manipulation instructions in 8086 with examples.	10	2	C311.2	Understand
5(A)		Write an ALP to compare two strings in 8086.	5	2	C311.2	Apply
5(B)		Write a Short notes on Assembler directives in 8086.	5	2	C311.2	Apply