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SET - 1

III B. Tech II Semester Supplementary Examinations, November -2018 MICROPROCESSORS AND MICROCONTROLLERS

(Electrical and Electronics Engineering)

Time: 3 hours Max. Marks: 70

Note: 1. Question Paper consists of two parts (Part-A and Part-B)

- 2. Answering the question in **Part-A** is compulsory
- 3. Answer any THREE Questions from Part-B

PART -A

IANI -A			
1	a)	List the functions of Bus Interface Unit in 8086.	[3M]
	b)	Explain the functionality of the signals INTA and ALE.	[4M]
	c)	List variables, suffix and operators used in assembly language programming.	[4M]
	d)	Explain the use of handshaking signals in 8255.	[4M]
	e)	What is the purpose of PSW register in 8051 microcontroller?	[3M]
	f)	What is sourcing and sinking currents w.r.t LED's.	[4M]
PART -B			
2	a)	What are the advantages of using memory segmentation and give the rules associated with it	[8M]
	b)	Explain the function of following registers in 8086 microprocessor: i)BP,SP,SI,DI ii)IP and Instruction Queue	[8M]
3		Explain memory interfacing with 8086 with the help of block diagram and also explain why two bus cycles are required to access old address word?	[16M]
		explain why two das eyeles are required to access old address word.	
4	a)	What are assembler directives and explain a few with examples.	[8M]
	b)	Write an ALP to sort a given set of 8 – bit unsigned integers in to descending order by any one method.	[8M]
5	a)	Explain the different modes of 8255.	[8M]
	b)	Explain the structure of RAM and EPROM.	[8M]
6	a)	List and explain in brief about the features of 8051 microcontroller.	[8M]
	b)	Discuss Serial communication control in 8051microcontroller	[8M]
7	a)	Discuss the interfacing procedure of Seven segment display with the 8051 microcontroller	[10M]
	b)	List and discuss the industrial applications of 8051	[6M]
