BTS(C) – V – 09 – 053 – E

B. Tech Degree V Semester Examination, November 2009

EC/EB 503 ADVANCED MICROPROCESSORS AND MICROCONTROLLERS

(2002 Scheme)

Time : 3 Hours Maximum Marks : 100

I.		With a neat block diagram explain the architecture of 8086 microprocessor.	(20)
		OR	
II.	(a)	Explain the 8086 Min mode, with a block diagram.	(15)
	(b)	Compare 8086 and 8088.	(5)
III.	(a)	Describe the various addressing modes of 8086 with examples.	(12)
	(b)	What are assembler directives? Give examples.	(8)
		OR	
IV.	(a)	Describe the following (i) Assembler (ii) Editor (ii) Linker (iv) Debugger	(10)
	(b)	Write an 8086 ALP to display the string "HELLO"	(10)
V.	(a)	Explain the real, protected and virtual modes of 80386.	(15)
	(b)	Compare 80386 and 80486.	(5)
		OR	
VI.	(a)	Explain the control registers in 80386.	(10)
	(b)	Explain the test register in 80386.	(5)
	(c)	List the differences between virtual and protected modes of 80386.	(5)
VII.	(a)	Explain the pipe lining employed in the Pentium architecture.	(7)
	(b)	Compare the architectures of Pentium and Pentium pro.	(6)
	(c)	Describe the features of RISC Systems.	(7)
		OR	
VIII.	(a)	Compare and contrast RISC and CISC Systems.	(10)
	(b)	Explain super scalar architecture.	(10)
IX.	(a)	Draw a neat diagram of 8051 microcontroller architecture and explain.	(15)
	(b)	Compare microprocessors and microcontrollers.	(5)
		OR	
X.	(a)	Explain how a Liquid Crystal Display may be interfaced to an 8051 microcontroller.	(10)
	(b)	Explain the various addressing modes of 8051 microcontroller with examples.	(10)

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