31/5/2011

T.E. Comp VT (Rev)
Advanced Microprocessor

Con. 3411-11. (REVISED COURSE) RK-2628

(3 Hours) [Total Marks : 100

N.B. : (1) Question No. **1** is **compulsory**.
(2) Attempt any **four** questions out of remaining **six** questions.

1.	A)	Enlist the instruction pairing rules of 'U' and 'V' pipeline in Pentium.	[05]
	B)	Write short note on: V-86 mode of operation.	[05]
	C)	State the features of Intel Itanium processor.	[05]
	D)	Explain the data types supported by SPARC architecture.	[05]
2.	A)	Explain with diagram arithmetic pipeline design for 8 bit multiplication.	[10]
	B)	What are the types of instruction hazards? Explain in detail.	[10]
3.	A)	Draw protected mode address translation mechanism in 80386DX with neat flow diagram. Explain segment translation in detail.	[10]
	B)	State the use of following X86 flags: RF, TF, VM, NT, IOPL	[05]
	C)	What is segment descriptor? Draw & explain the structure.	[05]
4.	A)	Explain how the flushing of pipeline problem is minimized in Pentium architecture.	[10]
	B)	Write short note on following: Branch prediction logic.	[05]
	C)	Explain different stages of floating point pipeline of Pentium Processor.	[05]
5.	A)	List the important features of Pentium-II processor. Differentiate between Pentium-II & Pentium-III.	[10]
	B)	Write short note on Intel's Net burst micro architecture.	[05]
	C)	Write the features of Pentium-IV.	[05]
6.	A)	Explain the architecture of Super SPARC microprocessor with the help of neat block diagram.	[10]
	B)	Draw and explain various instruction formats of SPARC processor.	[10]
7.		Write short note on the following.	[20]

A) USB B) SCSI C) ISA D) EISA