Total No. of Questions-8

Time: Two Hours

[Total No. of Printed Pages-2

Seat	
Dene	1
No	1
NO.	1

[4957]-1080

Maximum Marks : 50

S.E. (Comp. Engg.) (Second Year) EXAMINATION, 2016 COMPUTER ORGANIZATION

(2012 PATTERN)

- ${\bf 1.} \hspace{0.5cm} (a) \hspace{0.5cm} \hbox{What are the different speed-up techniques for processor.} \ [6]$
 - (b) Explain IAS computer with suitable diagram. [6]

Or

- (a) Draw and explain function of E-flag and CR₀ of 80386.
 - (b) Explain IEEE standard single precision and double precision floating point formats. [6]
- (a) Write micro-operations and control signals for ADD (R3), R1 instruction for single bus organization of CPU. [6]
 - (b) Draw flow chart for restoring division operation. [6]

Or

 (a) What are the advantages of pipelining? Define latency and throughput of pipeline. [6]

P.T.O.

5.	(a)	Explain with suitable diagram memory hierarchy in computer
		system. [6]
	(b)	Explain the need of bus arbitration ? Explain daisy chaining
		scheme. [7]
		Or
6.	(a)	Write a short note on DDR3 memory organization. [6]
	(b)	Write a short note on Intel Nehalem memory organization with
		diagram. [7]
7.	Write	e short notes on : [13]
7	(i) (ii)	Hyper-Transport Technology Instruction format of IA 64
	(iii)	NVDIA GPU architecture.
		Or
8.	(a)	Write short notes on : [8]
		(i) Itanium processor
		(ii) Speculative Loading in IA64
	(b)	Explain the technology supported and interfaces of i7 mobile
		version. [5]

Compare hardwired control and microprogrammed control unit. [6]

(b)