Code No: 5407 / N

FACULTY OF ENGINEERING

B. E. 4/4 (CSE) I-Semester (**New**) (**Main**) Examination,
November / December 2009

Subject : **Advanced Computer Architectures** (Elective – I)

Time : 3 Hours

Max. Marks: 75

Note: Answer all questions of Part-A and any **Five** questions from Part-B.

Part – A (25 Marks)

1.	List out the basic parallel techniques?	2
2.	What are the basic computational models?	3
3.	What is Multiway branching?	2
4.	Describe the concept of code scheduling for ILP processors.	3
5.	What is associative processing?	2
6.	What is the design space involved in SIMD architectures?	3
7.	What is vectorization?	2
8.	What are systolic architectures?	3
9.	What do you mean by multi-threaded architectures?	3
10.	Define Cache coherence.	2

Part – B (50 Marks)

11.	Explain pipelined execution of integer and Boolean instructions with an example?	10
12.a)	Differentiate between delayed branching and branch processing.	6
b)	Briefly explain Gaurded execution.	4
13.	Discuss the working of associative string processor.	10
14.	Discuss the convex C4 / X4 system.	10
15.	Discuss various fine-grained systems in distributed memory MIMD Architectures.	10
16.	Expalin the following : a) CC-NUMA b) COMA	5+5
17.	Write short notes on any **Two** the following : a) Coarse-gained SIMD architectures b) Optical Computing c) Multilevel hierarchical framwork	5+5

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