

FACULTY OF ENGINEERING

B.E. 4/4 (CSE) I - Semester (Main) Examination, December 2011

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

Time : 3 Hours

Max. Marks: 75

Note: Answer all questions of Part – A. Answer any five questions from Part-B.**PART – A (25 Marks)**

1. Define Pipelining. (2)
2. Define Super Computer. (2)
3. What is loop scheduling ? (2)
4. What are neural computers? (2)
5. What is vectorization? (2)
6. What is ILP? Give examples. (3)
7. What are the functions of scalable computers? (3)
8. What is Coherence? Give example. (3)
9. What is optical computing? (3)
10. Explain Dataflow computers. (3)

PART – B (5x10=50 Marks)

11. What is parallel processing? Describe various architectures. (10)
12. Explain the processing of control Transfer instructions. (10)
13. Discuss associative processing and compare with Neural architecture. (10)
14. Explain the design issues of scalable MIMO computers. (10)
15. Explain Dynamic interconnection networks in detail with topologies. (10)
16. Explain principles of multi threading. (10)
17. Explain mapping programs on to multi computers. (10)