Code: 9D06103

M.Tech I Semester Regular & Supplementary Examinations February 2016

ADVANCED COMPUTER ARCHITECTURE

(Common to DSCE, DECS & ES)

(For students admitted in 2011, 2012, 2013, 2014 & 2015 only)

Time: 3 hours Max Marks: 60

Answer any FIVE questions

All questions carry equal marks

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1 (a) Explain the equal duration computation model for the multiprocessors.
(b) How are the performance of computer systems are measured? Explain.

2 (a) Explain the process of encoding an instruction set.
(b) Describe the addressing modes for signal processing.

3 (a) Explain how hardware based speculation can address these limitations.
(b) What is the degree of parallelism? Explain.

4 (a) Give a brief account on instruction level parallelism.
(b) Explain basic VLIW approach.

5 (a) What is meant by dynamic scheduling? Explain.
(b) Discuss the significance of virtual memory.

6 (a) Differentiate vector and multithread architecture.
(b) What is vector processing and list its characteristics?

7 (a) What are the rules in designing an I/O system?
(b) Discuss design space of shelving.

8 Write short notes on:
(a) RAID.
(b) Designing a cluster.

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