



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

- 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.
