

Code: R7410504

R07

B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013

**ADVANCED COMPUTER ARCHITECTURE**

(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Explain about quantitative principles of computer design.  
(b) Balancing of subsystem with bandwidth.
- 2 Explain about pipelined floating point adder with four processing stages.
- 3 Write about:
  - (a) Addressing modes of signal processing.
  - (b) Operations in instruction set.
- 4 Explain memory hierarchy, static branch operation.
- 5 Discuss pipeline scheduling in detail with neat diagrams.
- 6 Explain shared memory architecture and discuss distributed shared memory.
- 7 Explain about RAID, SIMD array processor.
- 8 Define:
  - (a) Cluster inter and intra
  - (b) Time of flight
  - (c) Transport latency
  - (d) Over head

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