

R19

Code No: 5655AH

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

M.Tech I Semester Examinations, July/August - 2021

ADVANCED COMPUTER ARCHITECTURE
(Embedded Systems)

Max. Marks: 75

Time: 3 Hours

Answer any Five questions
All questions carry equal marks

1. List performance factors and system attributes to be considered in the design of a computer system? Explain how performance factors are influenced by system attributes? [15]
2. What is an addressing mode? Explain various types of addressing modes in detail. [15]
3. Which are the major categories of advanced optimization of cache performance? Explain any two. [15]
4. Draw a neat sketch to explain the steps of five stage pipeline for RISC processor. [15]
5. Explain the basic VLIW approach for exploiting ILP, using multiple accesses. [15]
6. With a neat diagram give the basic structure of Tomasulo's approach to perform dynamic scheduling? [15]
7. With a neat diagram, explain the basic structure of systematic shared memory and distributed shared memory architecture? [15]
8. With a neat diagram explain IA-64 architecture in detail. [15]

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