

Code No: 155AA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech III Year I Semester Examinations, February - 2022****ADVANCED COMPUTER ARCHITECTURE****(Computer Science and Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- 1.a) Explain the Multiprocessors and Multi computers. [7+8]
b) Discuss the Multi vector and SIMD Computers.
- 2.a) Elaborate the PRAM and VLSI models. [7+8]
b) Describe the System Interconnect Architectures.
- 3.a) Explain the Advanced Processor Technology. [7+8]
b) Explain the applications of parallel processing.
- 4.a) Discuss the Speed up performance laws. [7+8]
b) Describe the processes and Memory Hierarchy.
5. With the help of a neat diagram, explain the classification of pipeline processors in detail. [15]
- 6.a) Illustrate the Instruction Pipeline design. [7+8]
b) Explain about shared memory organization.
- 7.a) Discuss the Multiprocessors and Multicomputer. [6+9]
b) Explain the message passing mechanisms.
- 8.a) List and explain the Principals of Multithreading. [7+8]
b) Explain the data flow architecture.

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