

CS 8491 Computer Architecture
Important 13mark questions

Unit I

1. Explain in detail the various components of computer system with neat diagram.
2. What is an addressing mode? Explain the various addressing mode with suitable example.

Unit II

1. Explain in detail about the multiplication algorithms with suitable example and diagram.
2. Discuss in detail about division algorithm in detail with diagram and explain.

Unit III

1. Explain how the instruction pipeline works? What are the various situations where an instruction pipeline can stall? Illustrate with an example.
2. Explain in detail the operation of the data path.

Unit IV

1. Explain in detail about Flynn's classification of parallel hardware.
2. Explain in detail about hardware multithreading.

Unit V

1. Draw a typical block diagram of a DMA controller and explain how it is used for direct data transfer between memory and peripherals?
2. What is virtual memory? Explain in detail about how virtual memory is implemented with neat diagram?