

17CS72 ACA-ASSIGNMENT- 2

1. What is arbitration? Explain different types of arbitration.
2. Explain sequential and weak consistency models.
3. What are the different techniques for branch prediction? Explain.
4. Explain multiply pipeline design to multiply two 8-bit integers
5. Explain with diagram, Backplane bus Specification
6. For the reservation table of a non-linear Pipeline

	1	2	3	4	5	6	7	8
S1	x					x		x
S2		x		x				
S3			x		x		x	

- i) What are forbidden Latencies ? Write initial Collision Vector
 - ii) Draw state transition Diagram
 - iii) List Simple cycles and greedy cycles
 - iv) Determine MAL
7. Explain Prefetch Buffer and internal Data forwarding mechanism used in Instruction Pipelining
 8. Explain routing in omega network.
 9. Explain Cross bar Networks and cross bar switch design in multiprocessor system
 10. With necessary sketches Explain Cache-coherence problems in data sharing and in process migration
 11. Explain snoopy bus protocols for maintaining data consistency in caches
 12. Explain Directory-based –protocols for Cache coherence