

COMSATS University Islamabad

Spring 2021

EEE440 Computer Architecture

Quiz No.: 04

Program: BCS-7(A, B, C), BEE – 8A, 8B, BCE - 12

Total Marks: 10

Semester: Spring 2021

Instructor: M. Dilshad Sabir

Time: 1hr

1. Analyze the differences between the directory coherence protocol and the snooping coherence protocol? [4]

2. Assume that words x1 and x2 are in the same cache block, which is in the shared state in the caches of both P1 and P2. Assuming the following sequence of events, identify each miss as a true sharing miss, a false sharing miss, or a hit. Any miss that would occur if the block size were one word is designated a true sharing miss. [6]

Time	P1	P2
1	Write x1	
2		Read x2
3	Write x1	
4		Write x2
5	Read x2	