Quiz#3b

Given Memory size = 16MB
Cache Size = 64KB
Block Size=8

Answer: 1

Word: Word will take 3 bits, as we need represent 8 words and 2^3=8.
Line: We shall have 8k lines, as Cache size = 64KB, and each line has 8 bytes, therefore we shall have 64k/8=8k lines. And to represent 8k lines, we shall have 13 bits, as 2^{13}=8k
Tag=24-13-3=8

Answer: 2

Given address: 1111 1100 1001 0000 10101**001**
Word will have last 3 bits: 001
Line will have 13 bits as: 1 0010 0001 0101

Answer: 3

Given Associative mapping, and 24 bit adress ***FC90A9.***
Given address: 1111 1100 1001 0000 10101**001**
Word
Word will have last 3 bits: 001 = > 0001 = 1h
Block
1 1111 1001 0010 0001 0101
0001 1111 1001 0010 0001 0101
1 F 9 2 1 5
(1F9215)h