**Question-1 (Covers Block 1)**

(a) What are the differences between signed 1’s complement notation and

signed 2’s complement notation for representation of negative fixed point

numbers? Find the range of numbers that can be represented in both these

notations, if the size of the notation is 8 bits (including sign bit). Explain the

difference in the range of the two notations. Perform the following

arithmetic operations using signed 2’s complement 8-bit representation.

(Please note that the numbers given below are in decimal notation)

i) Subtract 30 from –98

ii) Add 69 and 59

Please indicate the overflow if it occurs. How have you identified the

overflow?