

# Autumn Break Homework

## XI- Computer Science

Q1. Draw the block diagram of a computer system. Briefly write about the functionality of each component

Q2. What is the need of RAM? How does it differ from ROM?

Q3. Express the following decimal numbers into hexadecimal numbers.

(i) 548 (ii) 4052 (iii) 58 (iv) 100.25

Q4. Try the following conversions.

(i)  $(514)_8 = (?)_{10}$  (iv)  $(4D9)_{16} = (?)_{10}$

(ii)  $(220)_8 = (?)_2$  (v)  $(11001010)_2 = (?)_{10}$

(iii)  $(76F)_{16} = (?)_{10}$  (vi)  $(1010111)_2 = (?)_{10}$

Q5. Convert the following binary numbers into octal and hexadecimal numbers.

(i) 1110001000 (ii) 110110101 (iii) 1010100 (iv) 1010.1001

Q6. Encode the word 'COMPUTER' using ASCII and convert the encoded value into binary values.