MODEL ACTIVITY TASKS CLASS – XI CHEMISTRY

Chapter: Some basic concepts in chemistry

Write the answers to the following questions:

- 1. a) If the reference of atomic weight scale is changed from the present one ,viz. $^{12}{}_{6}C = 12.00000$ units to $^{12}{}_{6}C = 24.00000$ units, will it lead to any change in the atomic weights of other elements? Explain.
 - b) Will it lead to any change in the magnitude of the atomic mass unit?
 - c) Will the molar volume of an ideal gas remain 22.4 L despite the said change in the atomic weight scale?
- 2. Will there be any difference in the experimentally determined values of Avogadro constant in two scales of atomic weight, one in which $^{12}{}_{6}\text{C}$ =12.00000 units , and the other where $^{16}{}_{8}\text{O}$ = 16.00000 units ? Give reasons .
- 3. Explain why the term "molecular weight" is inappropriate for sodium chloride.
- **5.** Explain the significance of Avogadro constant in physics, chemistry, biochemistry etc.