CBSE

IS MATTER AROUND US PURE WS 1

Class 09 - Science

Section A

1. Metanil yellow, an adulterant used in Arhar dal is basically: **[1]**

   a) a dye
   b) an acid
   c) a detergent
   d) a base

2. Which one of the following will result in the formation of a mixture? **[1]**

   a) Breaking of ice cubes into small pieces
   b) Adding sodium metal to water
   c) Agitating a detergent with water in a washing machine
   d) Crushing of a marble tile into small particles

3. What is meant by a substance? **[1]**
4. Is fresh air which we breathe in, a pure substance in terms of science? **[1]**

Section B

5. A compound is regarded as a pure substance while the mixture is not. Give reason. **[2]**

Section C

Question No. 6 to 9 are based on the given text. Read the text carefully and answer the questions: **[4]**

Homogeneous mixtures are regarded as solutions or true solutions. Heterogeneous mixtures are of two types. These are suspensions and colloidal solutions. These differ in the size of the particles responsible for the difference in their properties. In a suspension, the particle size is more than 10^{-5} cm whereas in a colloidal solution, it ranges between 10^{-5} cm to 10^{-7} cm. The two phases which constitute colloidal solutions, are dispersed phase and dispersion medium. Based upon their nature, the colloidal solutions are classified into eight types. The mixture of the non-reacting gases is always homogeneous irrespective of their nature. Therefore, it is not a colloidal solution.

6. Scattering of light occurs when a beam of light is passed through Blood. Why?
7. What is Tyndall effect?
8. What is called colloidal solution?
9. Give an example of colloidal solution and identified their dispersed phase and dispersion medium?