(Chapter 16)(Chemistry in Everyday Life)

XII

Intext Questions

Question 16.1:

Sleeping pills are recommended by doctors to the patients suffering from sleeplessness but it is not advisable to take its doses without consultation with the doctor, Why?

Answer

Most drugs when taken in doses higher than recommended may cause harmful effects and sometimes, may even lead to death. Hence, a doctor should always be consulted before taking any medicine.

Question 16.2:

With reference to which classification has the statement, 'ranitidine is an antacid" been given?

Answer

The given statement refers to the classification of pharmacological effects of the drug. This is because any drug that is used to counteract the effects of excess acid in the stomach is called an antacid.

Question 16.3:

Why do we require artificial sweetening agents?

Answer

A large number of people are suffering from diseases such as diabetes and obesity. These people cannot take normal sugar i.e., sucrose as it is harmful for them. Therefore, artificial sweetening agents that do not add to the calorie intake of a person are required. Saccharin, aspartame, and alitame are a few examples of artificial sweeteners.

Question 16.4:

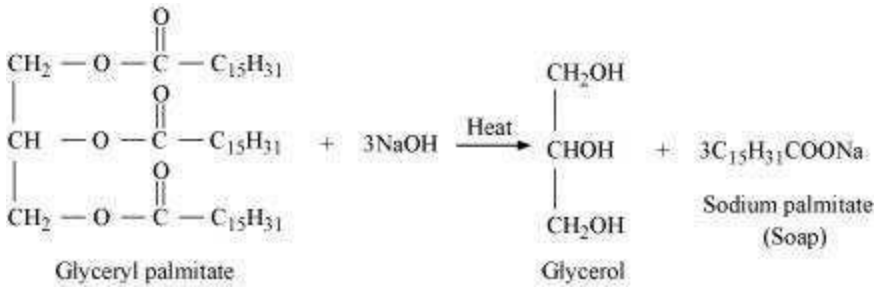
Write the chemical equation for preparing sodium soap from glyceryl oleate and glyceryl palmitate. Structural formulae of these compounds are given below.

(i) $(C_{15}H_{31}COO)_3C_3H_5$ – Glyceryl palmitate

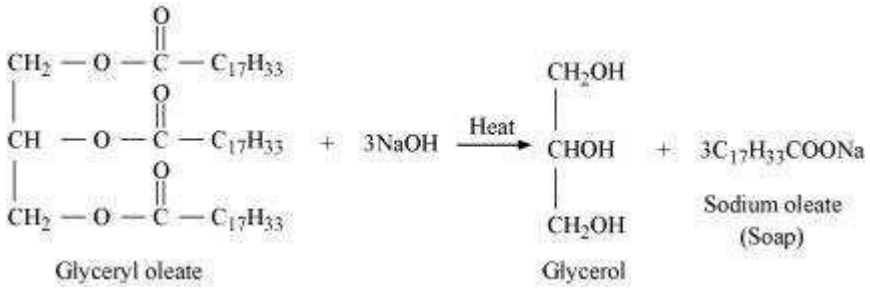
(ii) $(C_{17}H_{33}COO)_3C_3H_5$ – Glyceryl oleate

Answer

(i)



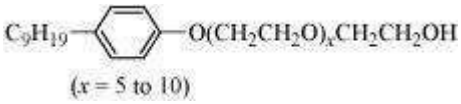
(ii)



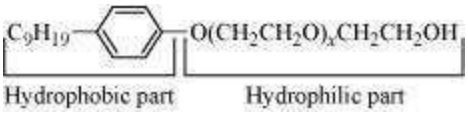
Question 16.5:

Following type of nom-ionic detergents are present in liquid detergents, emulsifying agents and wetting agents. Label the hydrophilic and hydrophobic parts in the molecule.

Identify the functional group (s) present in the molecule.



Answer



Functional groups present in the molecule are:

(i) Ether, and

(ii) primary alcoholic group