

### **Key points for Enrichment Biology Topic 5-8**

#### **1. Topic 5: Basic Inorganic Chemistry**

The students should understand the fact that a living organism basically represents an assembly of chemical molecules (e.g., inorganic or organic compounds) that function in a way to exhibit the properties of life. Thus, basic inorganic chemistry and basic inorganic chemistry are essential to further understand the physiology, pathology and therapy. Under Topic 5, the students should understand the basic concepts, definitions and theories, identify the formation and properties of chemical bonds and the importance of inorganic elements.

#### **2. Topic 6: Basic Organic Chemistry I**

Under Topic 6, the students should understand the basic concepts and definitions in organic chemistry and identify the formation, properties, functional groups and chemical classes of organic compounds.

#### **3. Topic 7: Basic Organic Chemistry II**

Under Topic 7, the students should understand the systematic nomenclature and type of formula.

#### **4. Topic 8: Basic Organic Chemistry III**

Under Topic 8, the students should understand the structural isomerization, functional isomerization and chirality of organic compounds.