# **Organ Systems**

### Solution 1.a:

The digestive system, respiratory system, circulatory system, excretory system, nervous system and reproductive system are some of the organ systems in the human body.

### Solution 1.b:

The organs of the digestive system include the teeth, tongue, stomach, small intestine, large intestine and associated glands such as the salivary glands, liver and pancreas.

#### Solution 1.c:

Salivary glands are located near the throat and the ears.

#### Solution 1.d:

Intestinal juice secreted by the intestinal glands, bile secreted by the liver and pancreatic juice secreted by the pancreas mix with the food in the small intestine and help to digest it.

#### Solution 1.e:

The nose, trachea, lungs, bronchi, alveolus, diaphragm and ribcage helps in respiration.

## **Solution 2:**

- 1. Alveoli
- 2. Diaphragm
- 3. Saliva
- 4. Stomach
- 5. Intestinal juice

### **Solution 3:**

- <u>Digestive juice:</u> Digestive juice is the secretion of the organs of the digestive system. It helps in the conversion of complex food components into simple soluble food substances.
- 2. **Saliva:** Saliva is secreted by the salivary glands and contains an enzyme called ptyalin. It helps in lubrication, chewing and digestion of food.

- 3. **Stomach:** A large bag-like part of the alimentary canal in which food is churned and mixed with gastric juice is called the stomach.
- 4. <u>Small intestine:</u> The small intestine is a very long, narrow and coiled part of the alimentary canal. It helps in the complete digestion of food followed by the absorption of digested food.
- 5. <u>Large intestine:</u> The large intestine extends after the small intestine and appears to have bulges on the outside. It helps in the absorption of remaining water from the undigested food matter.
- 6. <u>Anus:</u> The anus is the last part of the alimentary canal. It is an opening through which the remaining undigested, solid waste material is passed out of the body.

## **Solution 4:**

Saliva is produced by the salivary glands located near the throat and the ears. The salivary glands have tiny ducts through which saliva is secreted into the mouth. Saliva helps in proper mixing and swallowing of food. It contains a digestive juice called ptyalin which helps in the conversion of complex starch into simple sugar such as glucose.

### **Solution 5:**

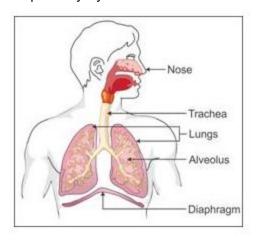
- 1. Alveoli (Alveoli are minute sacs in the lungs which help in respiration, whereas gastric juice, intestinal juice and saliva help in the digestion of food.)
- 2. Pancreas (Pancreas secretes pancreatic juice which helps in digestion, whereas the diaphragm, alveoli and trachea are the respiratory organs which help in the respiration process.)

#### **Solution 6:**

(a) Digestive organs	Shape of digestive organs
Stomach	Bag-like part
Small intestine	Coil-like part
Large intestine	Part which bulges on the outside
(b) Digestive organ	Digestive juice
Small intestine	Intestinal juice
Liver	Bile
Pancreas	Pancreatic juice

## **Solution 7.a:**

# Respiratory system:



## **Solution 7.b:**

## Digestive system:

