WORKSHEET 1

CHAPTER 1 – LIFE PROCESSES (I) NUTRITION

A. Tick (✓) the correct option.

1. Which of following enzymes get mixed with food in our mouth?
   a. Trypsin b. Cellulose c. Pepsin d. Amylase
2. During photosynthesis oxygen is evolved from
   a. CO_2 b. water. c. glucose. d. chlorophyll.
3. The food in autotrophs is reserved in the form of
   a. protein. b. fatty acid. c. glycogen. d. starch.
4. Bile is produced by
   a. pancreas. b. liver. c. small intestine. d. stomach.
5. The pancreas pours its secretion into
   a. oesophagus. b. stomach. c. large intestine. d. duodenum.

B. Fill in the blanks.

1. Herbivores have longer small intestine to digest _____
2. _____ energy in used in splitting water molecules into hydrogen and _____
3. Gall bladder stores _____
4. _____ is the muscular and tubular part of the alimentary canal.
5. _____ is the first part of small intestine.

C. State whether the given statements are true (T) or false (F).

1. Stomach serves as a storehouse of food where complete digestion takes place.
2. Ileum is the last and main part of the small intestine.
3. Gastric glands are present in small intestine.
4. Succus entericus is an intestinal juice.
5. Light energy is not directly absorbed by chlorophyll molecules.

D. Match the following.

1. Leech	(*a*) mouth
2. Gastric glands	(*b*) pancreatic juice
3. *Paramecium*	(*c*) pepsin
4. Trypsin	(*d*) parasitic nutrition
5. Salivary amylase	(*e*) digestion in food vacuole

Name: ..... Teacher's signature: .....

Class: X Date: .....

E. Answer the following questions.

1. Why is nutrition essential for an organism?
2. What is the importance of emulsification of fats?
3. Mention the role played by gastric glands found in the wall of stomach.
4. Draw a labelled diagram of the human digestive system.
5. Write the sequence of important events taking place during photosynthesis.

ANSWERS

WORKSHEET 1

A. Tick (✓) the correct option.

1. d	2. b	3. d	4. b	5. d

B. Fill in the blanks.

1. Cellulose	2. Solar, oxygen	3. Bile juice	4. Oesophagus	5. Duodenum

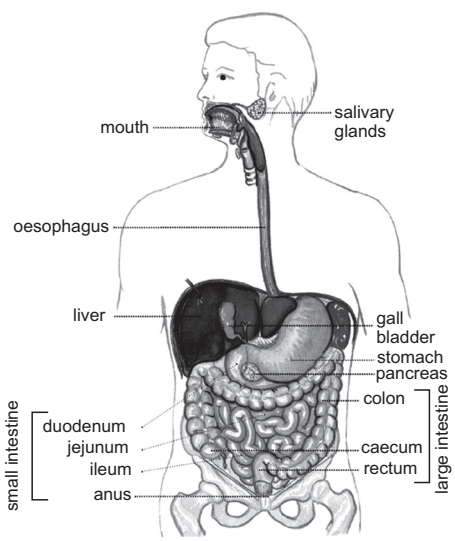
C. State whether the given statements are true (T) or false (F).

1. F	2. T	3. F	4. T	5. F

D. Match the following.

1. (*d*)	2. (*c*)	3. (*e*)	4. (*b*)	5. (*a*)

E. Answer the following questions.

1. Nutrition is required by an organism because:
   (*i*) It provides energy to carry out various life activities.
   (*ii*) Promotes growth of the body, which involves the formation of new protoplasm.
   (*iii*) Helps in repair of damaged cells and tissues.
   (*iv*) Produces enzymes and hormones which are essential to carry out and maintain proper life activities, and develop resistance against diseases.
2. Bile juice secreted by liver carries the emulsification of fat in the small intestine. Larger fat globules are broken down into smaller fat which increases the surface area and efficiency of enzymatic action to digest fat.
3. Gastric glands present in the walls of the stomach secrete gastric juice containing mucus, hydrochloric acid and enzyme pepsin in the stomach. Mucus protects the lining of stomach from the action of hydrochloric acid. HCl makes the medium acidic to activate the enzyme pepsin. The enzyme pepsin breaks down proteins into proteoses and peptones.
4. 

Digestive system and associated digestive glands in humans

5. The steps involved in the process of photosynthesis are:
   (*i*) Absorption of light energy by chlorophyll.
   (*ii*) Conversion of light energy to chemical energy and splitting of water molecules into hydrogen and oxygen.
   (*iii*) Reduction of carbon dioxide to carbohydrates.