

## EXERCISE # 1

### A. Single Choice Type Questions

- Q.1**  $\text{CO}_2$  and  $\text{O}_2$  balance in atmosphere is due to  
 (A) Photorespiration (B) Photosynthesis  
 (C) Respiration (D) Leaf anatomy
- Q.2** During photosynthesis the oxygen in glucose comes from  
 (A) Water  
 (B) Carbon dioxide  
 (C) Both from water and carbon dioxide  
 (D) Oxygen in air
- Q.3** First stable compound in  $\text{C}_3$  cycle is  
 (A) Phosphoglyceraldehyde  
 (B) Phosphoglyceric acid  
 (C) Fructose-1-6 diphosphate  
 (D) Glucose-6-phosphate
- Q.4** Dark reaction of photosynthesis occurs in the  
 (A) Stroma of the chloroplast outside the lamellae  
 (B) Space between the two membranes of the chloroplast  
 (C) Membranes of the stroma lamellae  
 (D) Thylakoid membrane of the grana
- Q.5** A specific function of light energy in the process of photosynthesis is to  
 (A) Activate chlorophyll  
 (B) Split water  
 (C) Synthesis of glucose  
 (D) Reduce  $\text{CO}_2$
- Q.6** Digestion within a digestive tract is  
 (A) Incomplete  
 (B) Extracellular  
 (C) The same as absorption  
 (D) An irreversible process
- Q.7** Dark reaction in photosynthesis is called so because  
 (A) It does not require light energy  
 (B) Cannot occur during daytime  
 (C) Occurs more rapidly at night  
 (D) It can also occur in darkness
- Q.8** Phloem always flows from a  
 (A) Solar source to sugar sink  
 (B) Sugar sink to sugar source  
 (C) Leaf to the xylem to the phloem  
 (D) Leaf to a root
- Q.9** With regards to natural eating habits, a human is  
 (A) An herbivore (B) A carnivore  
 (C) An omnivore (D) A Granivore
- Q.10** Muscular contractions of alimentary canal are  
 (A) Circulation (B) Deglutition  
 (C) Peristalsis (D) Churning
- Q.11** Which of the following regions of the alimentary canal of man does not secrete a digestive enzyme ?  
 (A) Oesophagus (B) Stomach  
 (C) Duodenum (D) Mouth
- Q.12** A digestive enzyme, salivary amylase, in the saliva begin digestion of  
 (A) Protein (B) Nucleic acids  
 (C) Fats (D) Carbohydrates
- Q.13** If you chew on a piece of bread long enough, it will begin to taste sweet because  
 (A) Maltase is breaking down maltose  
 (B) Lipases are forming fatty acids  
 (C) Amylase is breaking down starches to disaccharides  
 (D) Disaccharides are forming glucose
- Q.14** In the presence of lactase, lactose breaks down into molecules of  
 (A) Glucose and galactose

- (B) Glucose and fructose
- (C) Galactose only
- (D) Glucose only

- Q.15** Saliva has the enzyme  
(A) Pepsin (B) Ptyalin  
(C) Trypsin (D) Rennin
- Q.16** Pepsin digests  
(A) Proteins in stomach  
(B) Carbohydrates in duodenum  
(C) Proteins in duodenum  
(D) Fats in ileum
- Q.17** Curding of milk in the stomach is due to the action of  
(A) Pepsin (B) Renin  
(C) HCl (D) Tenin
- Q.18** Chief function of HCl is  
(A) To maintain a low pH to prevent growth of micro-organisms  
(B) To facilitate absorption  
(C) To maintain low pH to activate pepsinogen to form pepsin  
(D) To dissolve enzyme secreted in stomach
- Q.19** If the stomach did not produce any hydrochloric acid, which enzyme will not function ?  
(A) Ptyalin (B) Trypsin  
(C) Pepsin (D) Collagenase
- Q.20** Chief function of bile is  
(A) To digest fat by enzymatic action

- (B) To emulsify fat for digestion
- (C) To eliminate waste product
- (D) To regulate process of digestion

- Q.21** Where is bile produced ?  
(A) In gall bladder  
(B) In blood  
(C) In liver  
(D) In spleen
- Q.22** Ileum is  
(A) First part of the small intestine  
(B) Middle part of the small intestine  
(C) Last part of the small intestine  
(D) Not a part of the small intestine
- Q.23** Largest gland in human body is  
(A) Liver (B) Pancreas  
(C) Pituitary (D) Thyroid
- Q.24** The specific function of liver is  
(A) Excretion  
(B) Digestion  
(C) Histolysis  
(D) Glycogenesis and glycogenolysis
- Q.25** The original function of the vertebrate stomach was  
(A) Storage  
(B) Digestion  
(C) Enzyme secretion  
(D) Absorption

## EXERCISE # 2

### A. Very Short Answer Type Questions

- Q.1 Define heterotrophic nutrition.
- Q.2 What are heterotrophs ?
- Q.3 Which types of organisms are called consumers ?
- Q.4 What is saprophytic nutrition ?
- Q.5 Define saprophyte.
- Q.6 Define a herbivore.
- Q.7 What is carnivore ?
- Q.8 Which type of animal is called omnivore ?
- Q.9 Define digestion.
- Q.10 What is ingestion ?
- Q.11 Define egestion.
- Q.12 What is the mode of nutrition in *Amoeba* ?
- Q.13 What type of digestion occurs in *Paramoecium* ?

### B. Short Answer Type Questions

- Q.14 Differentiate between autotrophic and heterotrophic nutrition.
- Q.15 Distinguish saprophytes from parasites.
- Q.16 Differentiate between photosynthetic and holozoic nutrition.
- Q.17 How do saprophytic organisms obtain their nourishment ?
- Q.18 What is the importance of saprophytes ?

- Q.19 What is the action of hydrochloric acid of gastric juice ?

- Q.20 Name a digestive juice that has no enzymes. What is the role of this juice ?

- Q.21 Name the various parts of large intestine. What is the role of large intestine ?

### C. Long Answer Type Questions

- Q.22 Explain the mechanism of nutrition of *Amoeba* with the help of suitable diagram.
- Q.23 Describe the various types of heterotrophic nutrition.
- Q.24 Briefly describe the digestive system of humans.
- Q.25 What happens to food in the small intestine ?
- Q.26 Why chlorophyll is needed for photosynthesis.