Human Digestive System Practice

Choose one answer per question. Circle A, B, C, or D.

1. Which tube carries swallowed food from the throat to the stomach?
   A. Esophagus
   B. Trachea
   C. Duodenum
   D. Colon

2. Which action is an example of mechanical digestion?
   A. An enzyme cutting a protein into smaller chains
   B. An enzyme splitting a starch molecule
   C. Chewing a cracker into smaller pieces
   D. A simple sugar entering a blood vessel

3. What is the name for waves of muscle contraction that propel food along the digestive tract?
   A. Absorption
   B. Peristalsis
   C. Emulsification
   D. Secretion

4. What is the mixture of partially digested food and gastric juices called as it leaves the stomach?
   A. Lymph
   B. Saliva
   C. Bile
   D. Chyme

5. Which part of the small intestine receives the stomach's contents first?
   A. Jejunum
   B. Duodenum
   C. Ileum
   D. Cecum

6. Which enzyme in saliva begins breaking down starch while food is in the mouth?
   A. Salivary amylase
   B. Pepsin
   C. Lactase
   D. Trypsin

7. How does bile make larger fat droplets easier for digestive enzymes to act on?

A. It carries the intact droplets through the intestinal wall.
B. It joins the droplets into one larger pool.
C. It converts fat directly into glucose.
D. It disperses the fat into smaller droplets, exposing more surface.

8. Which structure regulates the passage of small amounts of stomach contents into the small intestine?

A. Ileocecal valve
B. Lower esophageal sphincter
C. Pyloric sphincter
D. Anal sphincter

9. As the colon absorbs water from its contents, what usually happens to the material left inside it?

A. It contains less water and generally becomes firmer.
B. It becomes more watery as fluid enters it from the colon wall.
C. Its water content stays the same because only salts cross the wall.
D. It becomes firmer only after it reaches the rectum.

10. Which substance is a building block released as digestive enzymes break down dietary protein?

A. Glycerol
B. Glucose
C. A fatty acid
D. An amino acid

11. A classroom animation shows two movement records. In A, contractions at alternating spots move contents back and forth with little net travel. In B, a contraction wave moves contents forward. Which labels match A and B, in order?

A. Absorption and secretion
B. Peristaltic propulsion and segmentation
C. Segmentation and peristaltic propulsion
D. Secretion and absorption

12. In a fictional colon diagram, 100 water units enter section A, 40 leave A and enter section B, and 12 leave B. Neither section adds water, and the only loss is absorption. Which section absorbs more units, and which absorbs a higher percentage of what enters it?

A. A absorbs more units and a higher percentage.
B. A absorbs more units, and B absorbs a higher percentage.
C. B absorbs more units and a higher percentage.
D. B absorbs more units, and A absorbs a higher percentage.

13. A fictional textbook diagram shows two vessels in a small-intestinal villus. Vessel A receives absorbed glucose and amino acids. Vessel B receives particles called chylomicrons that carry long-chain fats. What are A and B, in order?

A. Two lacteals
B. A lacteal and a blood capillary
C. Two blood capillaries
D. A blood capillary and a lacteal

14. Two fictional intestine models have the same outer dimensions. Model A has smooth lining with 12 surface units. Model B has folds and villi with 48 surface units. Which conclusion follows from the area measurements?

A. Model B exposes four times the lining area of Model A.
B. Model B absorbs four times as much of every nutrient.
C. Model B exposes 36 times the lining area of Model A.
D. Both models expose the same area because their outer dimensions match.

15. A classroom diagram marks a food mixture at pH 2 as it leaves the stomach. After bicarbonate-rich pancreatic fluid joins the mixture, the model shows pH 6. Which interpretation matches the normal entry site and the change in acidity?

A. The fluid enters in the stomach, and the mixture becomes less acidic.
B. The fluid enters in the duodenum, and the mixture becomes more acidic.
C. The fluid enters in the duodenum, and the mixture becomes less acidic.
D. The fluid enters in the colon, and the mixture becomes more acidic.