

### Digestive System Practice Quiz

Circle the correct answer choice or fill in the blank.

1. Which of the following organs has 3 layers of smooth muscle in its muscularis externa?

- A. small intestine      B. esophagus      C. stomach      D. large intestine      E. rectum

2. Chemical digestion of carbohydrates begins in the

- A. esophagus      B. stomach      C. duodenum      D. oral cavity      E. jejunum

3. The enzyme which begins carbohydrate digestion is named \_\_\_\_\_.

4. \_\_\_\_\_ is produced by the \_\_\_\_\_ and released from the \_\_\_\_\_ into the \_\_\_\_\_, aiding the digestion of fats through emulsification, which increases the surface area for the enzyme \_\_\_\_\_ to attack the triglyceride molecules.

5. Most of the nutrient absorption along the alimentary canal occurs in the

- A. ascending colon      B. stomach      C. jejunum      D. ileum      E. cecum

6. The taeniae coli of the large intestine is formed by the \_\_\_\_\_ layer of the muscularis externa.

7. The small intestine possesses permanent folds along its length known as

- A. plicae circulares      B. haustra      C. rugae      D. villi      E. intestinal crypts

8. The G cells of the stomach secrete the hormone \_\_\_\_\_, which stimulates the \_\_\_\_\_ and \_\_\_\_\_ cells.

9. The \_\_\_\_\_ cells secrete \_\_\_\_\_, the enzyme precursor which begins the chemical digestion of protein.

10. Protein digestion in the stomach requires the activation of \_\_\_\_\_ by \_\_\_\_\_, which is secreted by the \_\_\_\_\_ cells.

11. The \_\_\_\_\_ cells also secrete \_\_\_\_\_ which facilitates the absorption of vitamin B<sub>12</sub> in the ileum.

12. The specific tissue type of the submucosa is

A. areolar CT    B. dense irregular CT    C. reticular CT    D. smooth muscle    E. adipose

13. The muscularis externa of the upper third of the esophagus has primarily

A. skeletal muscle    B. smooth muscle    C. both skeletal and smooth muscle

14. The three major enzymes secreted by the pancreas into the duodenum are

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_(inactive form).

15. Which of the following structures secures the small intestine to the posterior abdominal wall?

A. greater omentum    B. lesser omentum    C. mesocolon    D. serosa    E. mesentery proper

16. The hormone \_\_\_\_\_ stimulates the release of pancreatic enzymes, buffers, and bile.

17. Nutrient-rich, oxygen-poor blood arrives at the liver through the \_\_\_\_\_ while oxygen-rich blood arrives via the \_\_\_\_\_.

18. In which region of the gastrointestinal tract are Peyer's patches most common?

A. stomach    B. duodenum    C. jejunum    D. ileum    E. sigmoid colon

## Answer Key

1. C. stomach
2. D. oral cavity
3. salivary amylase
4. Bile, liver/hepatocytes, gallbladder, duodenum, pancreatic lipase
5. C. jejunum
6. longitudinal
7. A. plicae circulares
8. gastrin, chief, parietal
9. chief, pepsinogen
10. pepsinogen, hydrochloric acid, parietal
11. parietal, intrinsic factor
12. B. dense irregular CT
13. A. skeletal muscle
14. pancreatic lipase, pancreatic amylase, trypsinogen
15. E. mesentery proper
16. cholecystokinin (CCK)
17. hepatic portal vein, hepatic artery proper
18. D. ileum