

**PHYSIOLOGY 300
PRACTICE EXAM 2 FALL 2019**

1. Which of the following is an accessory gland or organ of the digestion system?
 - A. gastric gland
 - B. salivary gland
 - C. stomach
 - D. esophagus
 - E. small intestine

2. Name the correct order of functional compartments of the GI tract through which the food moves after ingestion.
 - A. duodenum, jejunum, ileum, cecum, ascending colon
 - B. jejunum, duodenum, ileum, cecum, ascending colon
 - C. ileum, duodenum, jejunum, cecum, ascending colon
 - D. duodenum, jejunum, ileum, ascending colon, cecum
 - E. jejunum, duodenum, ileum, ascending colon, cecum

3. Motility in which of the following areas/structures of the GI tract is facilitated by GI smooth muscles?
 - A. oral cavity
 - B. upper esophageal sphincter
 - C. upper third of the esophagus
 - D. lower third of the esophagus
 - E. external anal sphincter

4. Which of the following sphincters separates the small intestine from the large intestine?
 - A. lower esophageal sphincter
 - B. pyloric valve
 - C. ileocecal valve
 - D. sphincter of oddi
 - E. internal anal sphincter

5. Protective epithelia are mainly found in _____ and they contain _____ that ensure that cells are strongly connected?
 - A. esophagus, desmosomes
 - B. esophagus, tight junctions
 - C. stomach, gap junctions
 - D. oral cavity, adherens junctions
 - E. small intestine, desmosomes

6. The muscularis externa in the large intestine consists of _____.
- A. a complete layer of circular muscles
 - B. a complete layer of longitudinal muscles
 - C. a layer of oblique muscles
 - D. A and B
 - E. A, B and C.
7. In the large intestine the surface area is increased through _____.
- A. folding of the submucosa into plica
 - B. folding of the mucosa into villi
 - C. folding of the mucosa into rugae
 - D. folding of the mucosa into plica
 - E. none of the above
8. Which of the following is **NOT** a function of the stomach?
- A. temporary storage of ingested foods
 - B. production of chyme
 - C. absorption of nutrients
 - D. mixing of ingested food with gastric juices
 - E. dissolving of ingested foods
9. The pharyngeal phase does **NOT** include _____.
- A. elevation of the uvula to close the nasal cavity
 - B. closing of the epiglottis
 - C. opening of the upper esophageal sphincter
 - D. inhibition of respiration
 - E. mastication
10. What types of motility are observed in the small intestine during a meal?
- A. segmentation
 - B. migrating motor complex
 - C. primary peristaltic wave
 - D. mass movement
 - E. gastric wave

11. The ions that propagate slow wave activity diffuse from cell to cell along an electrochemical gradient via _____.
- A. desmosomes
 - B. tight junctions
 - C. gap junctions
 - D. occluding junctions
 - E. gastrin receptors
12. Which of the following statements about slow waves is correct?
- A. The frequency of slow waves increases when food is detected in the GI tract.
 - B. Slow waves are initiated in M cells.
 - C. Slow waves are initiated in smooth muscle cells.
 - D. Slow waves are initiated in interstitial cells of cajal.
 - E. A slow wave is always followed by a muscle contraction.
13. The arrival of feces in the rectum initiates _____.
- A. opening of the internal anal sphincter
 - B. closing of the internal anal sphincter
 - C. opening of the external anal sphincter
 - D. a short reflex to the cephalic brain
 - E. a long reflex to the internal anal sphincter
14. Slow waves are _____.
- A. cycles of smooth muscle contraction and relaxation
 - B. cycles of membrane depolarization and repolarization
 - C. reflexes that originate and are integrated in the enteric nervous system
 - D. peristaltic contractions
 - E. segmental contractions
15. Mucus has a functional role in _____.
- A. protection only
 - B. lubrication only
 - C. enzyme activation only
 - D. protection and lubrication
 - E. protection, lubrication, and enzyme activation