

# GI system (MCQ's)

1. Mixing movements
  - (a) promote digestion by mixing food with digestive juices.
  - (b) facilitate absorption by exposing luminal contents to absorptive surfaces.
  - (c) take place only in the stomach.
  - (d) promote digestion by mixing food with digestive juices and facilitates absorption by exposing luminal contents to absorptive surfaces.
  - (e) all of these answers.
2. Digestive motility
  - (a) is accomplished by smooth muscle contractions.
  - (b) is accomplished by smooth and voluntary muscle contractions.
  - (c) may be propulsive in nature.
  - (d) both (a) and (b) above.
  - (e) both (a) and (c) above.
3. Digestive secretions include
  - (a) enzymes.
  - (b) bile.
  - (c) mucus.
  - (d) hormones.
  - (e) all of these answers.
4. Which is the primary absorptive organ of the digestive system?
  - (a) salivary glands.
  - (b) oral cavity.
  - (c) stomach.
  - (d) small intestine.
  - (e) colon.
5. Which of the following statements concerning parasympathetic innervation of the digestive tract is incorrect?
  - (a) in general, parasympathetic stimulation is excitatory to the digestive system.
  - (b) parasympathetic innervation to the digestive tract comes primarily through the vagus nerve.

- (c) parasympathetic innervation is part of the extrinsic nerve supply to the digestive tract.
  - (d) parasympathetic stimulation of the salivary glands produces a saliva rich in mucus.
  - (e) parasympathetic stimulation increases salivary, gastric, pancreatic, and biliary secretion.
6. The serosa is the
- (a) abdominal cavity containing the stomach.
  - (b) blood supply to the stomach.
  - (c) inner lining of the digestive tract.
  - (d) layer of smooth muscle of the digestive tract.
  - (e) outer connective tissue covering of the digestive tract.
7. The intrinsic nerve plexuses
- (a) produce spontaneous depolarization of the smooth muscle cells in the wall of the digestive tract.
  - (b) are located in the mucosa.
  - (c) coordinate local activity in the digestive tract.
  - (d) both (a) and (c) above.
  - (e) all of these answers.
8. The enteric nervous system
- (a) includes the myenteric plexes.
  - (b) includes the submucosal plexes.
  - (c) includes vagal nerve efferents.
  - (d) both (a) and (b) above.
  - (e) both (a) and (c) above.
9. The BER refers to the
- (a) basic eating reflex, which ensures that food is moved along the digestive tract at an appropriate rate.
  - (b) basic electrical rhythm consisting of spontaneous, rhythmic, wavelike fluctuations in membrane potential.
  - (c) basic emptying reflex, which governs the rate of gastric emptying.
  - (d) bowel evacuation reflex, or defecation reflex.
  - (e) none of these answers.
10. Which of the following is not a function of saliva? Saliva
- (a) facilitates swallowing.

- (b) serves as a solvent for molecules that stimulate taste buds.
  - (c) dissolves glucose to facilitate its absorption by the oral mucosa.
  - (d) has antibacterial action.
  - (e) aids speech.
11. Which of the following is entirely under nervous control and has no hormonal regulatory component?
- (a) salivary secretion.
  - (b) gastric secretion.
  - (c) pancreatic secretion.
  - (d) liver secretion.
  - (e) all of these answers have a hormonal regulatory component.
12. What prevents food from entering the nasal passages during swallowing?
- (a) elevation of the uvula
  - (b) contraction of the pharyngeal muscles
  - (c) positioning of the tongue
  - (d) tight apposition of the vocal cords over the glottis
  - (e) elevation of the epiglottis over the nasopharynx
13. What prevents food from entering the trachea during swallowing?
- (a) elevation of the uvula
  - (b) contraction of the pharyngeal muscles
  - (c) positioning of the tongue
  - (d) tight apposition of the vocal cords over the glottis
  - (e) elevation of the epiglottis over the pharyngoesophageal sphincter
14. The gastroesophageal sphincter is normally closed to prevent
- (a) air from entering the esophagus during.
  - (b) gastric contents from refluxing into the esophagus.
  - (c) vomiting.
  - (d) esophageal leaking into the stomach.
  - (e) food from entering the pharynx.
15. Which is not a brush border enzyme?

- (a) enterokinase.
- (b) aminopeptidase.
- (c) lipase.
- (d) lactase.
- (e) maltase.

16. Of the fluid entering the small intestine, \_\_\_\_\_% is reabsorbed.

- (a) 100
- (b) 95
- (c) 85
- (d) 50
- (e) < 50

17. Which of the following statements concerning the colon is correct?

- (a) The colon has as much absorptive capacity as the small intestine.
- (b) The final stages of carbohydrate and protein digestion occur in the colon.
- (c) Colonic movements are slower than those in the small intestine.
- (d) two of these answers.
- (e) all of these answers.

18. Select the terminal portion of the colon.

- (a) ascending.
- (b) descending.
- (c) pyloric.
- (d) sigmoid.
- (e) transverse.

19. Which of the following structures secrete mucus?

- (a) salivary glands

- (b) esophagus
- (c) stomach
- (d) colon
- (e) all of these answers.

20. The chief cells of the gastric mucosa secrete

- (a) bicarbonate ions.
- (b) HCl.
- (c) pepsinogen.
- (d) sucrase.
- (e) trypsin.

ANSWER: c

21. The parietal cells of the gastric mucosa secrete

- (a) HCl.
- (b) pepsinogen.
- (c) intrinsic factor.
- (d) both HCl and pepsinogen.
- (e) both HCl and intrinsic factor.

ANSWER: e

22. Which of the following statements concerning HCl secretion by the stomach is correct?

- (a) HCl inactivates salivary amylase and the pancreatic enzymes.
- (b) HCl activates pepsinogen.
- (c) it establishes a low pH in the stomach.
- (d) both (a) and (b) above.
- (e) all of these answers.

<b>Question</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Answer</b>	D	E	E	D	D	E	C	D	B
<b>Question</b>	10	11	12	13	14	15	16	17	18
<b>Answer</b>	C	A	A	D	B	C	B	C	D
<b>Question</b>	19	20	21	22					
<b>Answer</b>	E	C	E	E					

