

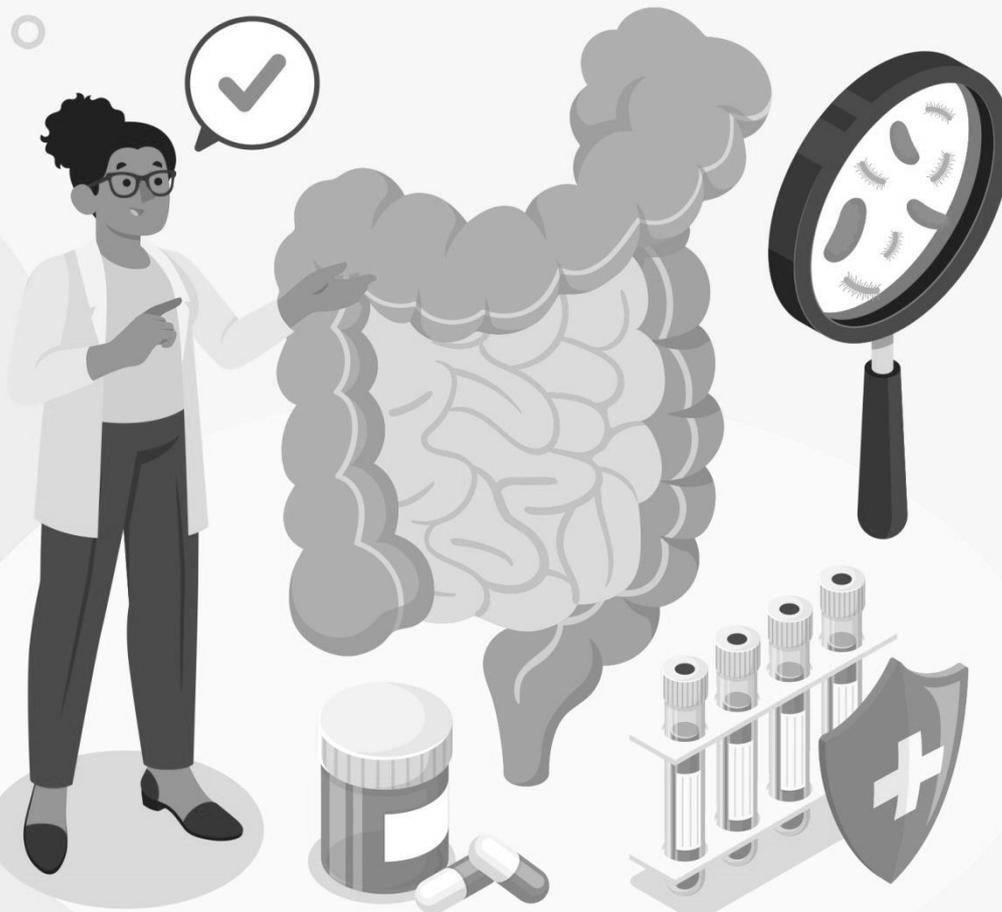
PHYSIO

GASTROINTESTINAL

2ND YEAR

MCQ L3

Dr/M.M



Written Q

1. Enumerate function of HCL ???
2. Mention mechanism of HCL secretion
3. define alkaline tide
4. Mention control of HCL secretion
5. Mention component of gastric mucosal barrier and factor that strengthen and weaken it 
6. Compare () proximal and distal motor unit ?
7. Def receptive relaxation ?
8. Def hunger contraction ?
9. Discuss gastric factor affecting gastric emptying ?
10. Discuss intestinal factor affecting gastric emptying ?
11. Mention factor eliciting enterogastric reflex ? 

MCQ formative and important Q

<p>1. Which of the following helps in the protection of the gastric mucosa?</p> <p>A) Sugar at high concentration</p> <p>B) Acetylcholine</p> <p>C) Increased mucosal blood flow</p> <p>D) Higher gastrin response</p> <p>E) Anti-inflammatory drugs</p>	C
<p>2. A 45-year-old man is found to have autoimmune disease destroys parietal cells of his stomach. Which of following is associated with his condition?</p> <p>A: Gastric ulceration</p> <p>B: Steatorrhea</p> <p>C: Protein deficiency</p> <p>D: Decreased hemoglobin</p> <p>E: Constipation</p>	D

<p>3. Which of the following can protect the gastric mucosal barrier?</p> <ul style="list-style-type: none"> a) Anti-inflammatory drugs. b) Anticoagulation drugs. c) Presence of prostaglandin. d) Decrease of mucosal blood flow. e) High-fat diet. 	C
<p>4. The gastric mucosal barrier can be protected and strengthened by:</p> <ul style="list-style-type: none"> a) Sugar at high concentration. b) Acetyl choline. c) Increased mucosal blood flow by Prostaglandin. d) Higher gastrin response to feeding e) Anti-inflammatory drugs. 	C
<p>5. Which of the following break down the gastric mucosal barrier?</p> <ul style="list-style-type: none"> a) Anti-prostaglandine. b) Anti-acids. c) Antibiotics. d) High protein diet. e) Low salt diet. 	A
<p>6. Gastric acid secretion is decreased by:</p> <ul style="list-style-type: none"> a) Vagal inhibition. b) Noradrenaline. c) Distension of stomach. d) Luminal peptides and amino acids. e) Histamine. 	A
<p>7. Which cells secrete intrinsic factor?</p> <ul style="list-style-type: none"> a) G cells. b) Parietal cells. c) S cells. d) D cells. e) Peptic cells. 	B

<p>8. Which can inhibit gastric HCL secretion?</p> <p>a) Gastrin. b) Acetylcholine. c) Prostaglandin. d) histamine. e) Muscarine.</p>	C
<p>9. HCL secreting cell is:</p> <p>a) Entroendocrine cells. b) Goblet cells. c) Chief cells. d) Mucous neck cells. e) Oxyntic cells.</p>	E
<p>10. HCL secretion in the stomach:</p> <p>(A) Is a function of peptic cells. (B) Require no energy. (C) Occurs by passive diffusion of both H^+ and CL^- in the gastric human. (D) Require presence of carbonic anhydrase enzyme.</p>	D
<p>11. The secretion of the intrinsic factor occurs in:</p> <p>a. Parietal cells of the stomach. b. Chief cells of the stomach. c. Upper duodenum. d. Beta cells of pancreas. e. Liver.</p>	A
<p>12. Basal acid output is increased with which of the following:</p> <p>a. Acidification of the antrum. b. Administration of a H_2 receptor antagonist. c. Vagotomy. d. Alkalinization of the antrum. e. Acidification of the duodenum.</p>	D

<p>13. The cephalic phase of gastric secretion:</p> <ul style="list-style-type: none"> a. Occurs when food reach the stomach. b. Is not accompanied by release of GRP. c. Is controlled by the vagi nerves. d. Is not blocked by injection of atropine. e. Conistitutes about one $\frac{1}{2}$ of the gastric juice secreted on eating. 	C
<p>14. Gastric HCL secretion:</p> <ul style="list-style-type: none"> a. Is a passive process that occurs in all parts of the stomach. b. Is stimulated by somatostatin, cimetidine & pirenzepine. c. Is inhibited by histamine, gastrin & acetylcholine. d. plays a significant rule in iron absorption. 	D
<p>15. Which of the following statement is true?</p> <ul style="list-style-type: none"> a. The intrinsic factors is secreted by the parietal cells of the gastric mucosa. b. The gastric juice can't digest the gastric mucosa because the cell membranes contain a pepsin activator. c. The stomach normally absorbs about 30% of the ingested food. d. The secretion of the gastric juice is associated with increased H^+ in the blood. e. The gastric juice is essential for the digestion of both fat and protein. 	A
<p>16. Under normal condition, the gastric secretion is:</p> <ul style="list-style-type: none"> a. Not affected by presence of food in the stomach. b. Stimulated by norepinephrine and inhibited by curare. c. Increased by distention of the stomach. d. Maximal before food ingestion. e. Absent after the food has entered into the duodenum. 	C

<p>17. Oxyntic or parietal cells secrete:</p> <p>(A) HCL. (B) Trypsin. (C) Zymogen granules. (D) Pepsinogen. (E) A & C.</p>	A
<p>18. The secretion of the intrinsic factor occurs in:</p> <p>a. Parietal cells of the stomach. b. Chief cells of the stomach. c. Upper duodenum. d. Beta cells of pancreas. e. Liver.</p>	A
<p>19. A 45 years old man is found to have a condition in which the parietal cells of his stomach have been destroyed by an autoimmune mechanism. This condition is often associated with which of the following?</p> <p>a. Pernicious anemia. b. Gastric ulceration c. Steatorrhea. d. Protein deficiency.</p>	A
<p>20. It's believed that in parietal cells of the gastric mucosa (which secrete hydrochloric acid), an active transport system is responsible for the transmembrane passage of:</p> <p>a. Chloride b. Carbon dioxide. c. Bicarbonate. d. Water</p>	A

<p>21. Pepsin, secreted by the gastric mucosa:</p> <ul style="list-style-type: none"> a. Continues to act in the neutral medium of the duodenum. b. Is proteolytic on the mucosal surface, in the alkaline medium provided by the mucus secreted by the surface cells of the stomach. c. Is synthesized within the chief cells. d. Does not increase in concentration in response to the mental stimuli found in the so' called cephalic phase of gastric digestion 	C
<p>22. Under the normal conditions, the bulk of gastric secretions are produces:</p> <ul style="list-style-type: none"> a. Before the food is ingested and while the pleasure of its ingestion is anticipated b. While the food stays in the stomach. c. After the food has entered the duodenum. d. During fasting periods. 	B
<p>23. About the cephalic phase of gastric secretion, all the following are true except:</p> <ul style="list-style-type: none"> a. It occurs before food enters the stomach b. It's inhibited by bilateral vagotomy c. It involves some release of gastrin d. It's due to both conditioned and unconditioned reflexes e. It begins only when food is tasted and accounts for most of the gastric secretion 	E
<p>24. HCl secretion includes all the following processes except:</p> <ul style="list-style-type: none"> a. Active transport of H^+ into gastric lumen b. H^+ is exchanged for K^+ from the extracellular fluid c. HCO_3^- diffuse into the extracellular fluid in exchange for Cl^- d. It's associated with production of a postprandial alkaline tide. 	B

<p>25. The gastric juice has all the following characteristics except:</p> <ul style="list-style-type: none"> a. It contains an alkaline secretion from the surface epithelium b. It's PH is always less than 3 c. It contains the intrinsic factor which is essential for vit.B₁₂ absorption d. It's antibacterial action is produced by its mucous content e. It's volume averages 2.5 liters/day 	D
<p>26. The gastric mucosal barrier is maintained by all the following except:</p> <ul style="list-style-type: none"> a. The nature of the surface membrane of the gastric mucosal cells and the tight junctions between these cells. b. Certain prostaglandins and the alkaline mucous secretion of the stomach c. The mucus gel-like membrane that coats the gastric mucous membrane d. Administration of H₂ receptor blocking drugs (e.g. cimetidine) e. Excessive amounts of bile salts, aspirin or ethanol. 	E
<p>27. Concerning HCl secretion, all the following is true except:</p> <ul style="list-style-type: none"> a. It's associated with increased PH of the gastric venous blood b. It's stimulated by gastrin, acetylcholine, histamine and norepinephrine c. The energy required is derived from ATP breakdown d. It involves formation of carbonic acid e. There is an active transport of H⁺ from oxyntic cells into the gastric lumen and K⁺ in the opposite direction 	B
<p>28. About gastric motility, which of the following statements is wrong:</p> <ul style="list-style-type: none"> A- it is marked in distal half of stomach. B- it is inhibited in painful conditions. C- it decreases by enterogastric reflex and by secretin and CCK D- it increases by overdistension of the stomach. E- it increases by duodenal distension. 	E

<p>29. Gastric emptying is inhibited by:</p> <ul style="list-style-type: none"> a) Gastrin. b) vasopressin. c) Motilin. d) VIP. e) CCK. 	E
<p>30. Gastric emptying is stimulated by:</p> <ul style="list-style-type: none"> a) CCK. b) Fat in the duodenum. c) Increased fluidity of the chyme. d) Secretin. e) Vagotomy 	C
<p>31. A periodic episodes of contractions occur, once every 90 minutes in fasted stomach is:</p> <ul style="list-style-type: none"> a) Receptive relaxation. b) Migrating motor complex. c) Peristaltic movement. d) Hunger contraction e) Basal electric rhythm 	B
<p>32. Gastric emptying:</p> <ul style="list-style-type: none"> (A) Is normally completed about 9 hours after ingestion of a usual meal. (B) Is slowest if the food is soft and rich in carbohydrates. (C) Is inhibited by excessive acidity in the duodenum. (D) Is accelerated by presences of fat or hypertonic solutions in the duodenum. (E) Is delayed by stomach distension and by vagal stimulation. 	C

<p>33. Acidification of the duodenum will:</p> <p>(A) Decrease pancreatic secretion of bicarbonate.</p> <p>(B) Increase secretion of gastric acid.</p> <p>(C) Decrease gastric emptying.</p> <p>(D) Increase contraction of the gall bladder.</p> <p>(E) Increase contraction of the sphincter of Oddi.</p>	C
<p>34. Distension of the stomach:</p> <p>a. Is associated with a decrease in its peristaltic movement.</p> <p>b. Leads to reduction of gastric juice secretion.</p> <p>c. Decrease the tone of the lower esophageal sphincter.</p> <p>d. causes an acute increase in the intragastric pressure.</p> <p>e. results in an increase in the volume of the stomach with a little rise in the intragastric pressure.</p>	E
<p>35. Gastric peristalsis:</p> <p>a. Originates in the distal half of the stomach.</p> <p>b. Is characterized by strong contractions of the antrum at the end of the wave.</p> <p>c. Ejects all the contents of the antrum into the duodenum.</p> <p>d. Decreases in intensity as it sweeps toward the pylorus.</p> <p>e. b&d</p>	B
<p>36. Which of the following hormones is involved in the initiation of the migrating motor complex:</p> <p>a. Gastrin</p> <p>b. Motilin</p> <p>c, Secretin</p> <p>d. Cholecystokinin</p> <p>e. Enterogastrone.</p>	B

<p>37. The main function of the cardiac sphincter of the stomach is to:</p> <ul style="list-style-type: none"> a. Prevent the reflux of the gastric content to the esophagus b. Facilitate storage of food on the lower part of the esophagus c. Mix the food particles entering the stomach. d. Control the rate of food entry into the stomach. e. None of the above. 	A
<p>38. Which of the following statements is wrong?</p> <ul style="list-style-type: none"> a. Repeated vomiting leads to dehydration, alkalosis, and K^+ depletion b. The rate of gastric emptying is affected by the fat content of food c. The enterogenic reflex is a gastro-inhibitory reflex d. The enterogenic reflex depends on vagal impulses as well as local enteric and prevertebral ganglionic reflexes e. The enterogastric reflex is of value in facilitating carbohydrates digestion. 	E
<p>39. About the gastric motility, all the following is true except:</p> <ul style="list-style-type: none"> a. It's marked in the distal half of the stomach b. It's inhibited in painful conditions c. It increases by vagal stimulation and decreases by symp. Stimulation d. It decreases by the enterogastric reflex and by the secretin and CCK hormones e. It increases by over distension of the stomach f. It decreases in response to presence of excess fat in the duodenum. 	E
<p>40. Gastric emptying is slowest after meal containing:</p> <ul style="list-style-type: none"> a) Carbohydrates. b) Fat. c) Protein. d) Indigestible fibers. e) Alcohol. 	B

<p>41. Gastric emptying increases with increase in which of the following:</p> <ul style="list-style-type: none"> a) <i>Intragastric volume.</i> b) <i>Intraduodenal volume.</i> c) <i>Fat content in duodenum.</i> d) <i>Osmolality of duodenum.</i> e) <i>Acidity of duodenum.</i> 	A
<p>42. Which of the following abolishes receptive relaxation of stomach?</p> <ul style="list-style-type: none"> a) <i>Parasympathetic stimulation.</i> b) <i>Sympathetic stimulation.</i> c) <i>Vagotomy.</i> d) <i>Gastrin.</i> e) <i>VIP.</i> f) <i>CCK.</i> 	C
<p>43. Distension and acidity of the duodenum will stimulate:</p> <ul style="list-style-type: none"> a) <i>Increased gastrin secretion.</i> b) <i>Gastric emptying.</i> c) <i>Pyloric pump.</i> d) <i>Enterogastric reflex.</i> e) <i>Mechanoreceptors in the stomach.</i> 	D
<p>44. Motor activity in GIT during fasting and sleep is:</p> <ul style="list-style-type: none"> a) <i>Basal electric rhythm.</i> b) <i>Mass movements</i> c) <i>Migrating motor complex.</i> d) <i>Peristalsis.</i> e) <i>Segmentation.</i> 	C