GENESIS

(Post Graduation Medical Orientation Centre)

Foundation-2 Batch

Total Number- 60 | **Subject: GIT Physiology** | **Time: 30 Min**

Pass Mark-42 | Question 16-30 is based on Single answers | **Date: 12/03/2020**

1. Following factors increases gastric emptying
a) Gastrin
b) Secretin
c) CCK
d) Motilin
e) Somatostatin
T F F T F

2. Secretin is released by
a) Acid in duodenum
b) Acid in stomach
c) Cells in the liver
d) Distention of colon
e) Distension of stomach
T F FFF

3. Functions of gastrin
a) Stimulates gastric acid and pepsinogen secretion
b) Relax lower esophageal sphincter
c) Stimulates insulin and glucogonsecrotion after CHO meal
d) Contraction of sphincter of Oddi
e) Stimulates the growth of gastro-intestinal mucosa
TFFFT

4. Motilin secreted from
a) Duodenum
b) Small Intestine
c) Colon
d) Mo cells
e) K cells
TTTTF

5. Hormones belongs to secretin family
a) Gastrin
b) Glucagon
c) Glicentin
d) CCK-PZ
e) GIP
FTTFT

6. Somatostatin
a) Reduces absorption
b) Reduces gastrin release
c) Reduces insulin secretion
d) Decreases intestinal motility
e) Stimulates glucagon secretion
T TTT F

7. Gastrin secretion is increased
a) After vagal stimulation
b) By enterogastric reflex
c) Following a protein meal
d) By GTP
e) During starvation
T F T T F

8. Entero – endocrine cells of GI tract includes
a) G cell
b) D cell
c) M cell
d) I cell
e) B cell
T T F T F

9. Regarding reaction of digestive Juices
a) Saliva usually slightly acidic
b) Gastric juice slightly acidic
c) Pancreatic juice alkaline
d) Intestinal juice strongly alkaline
e) Intestinal juice strongly acidic
TFTFF

10. Following are released as inactive form in digestive jaundice
a) Elastase
b) Trypsinogen
c) Phospholipase A2
d) Chymotrypsinogen
e) Pepsin
T TTTT

11. Intrinsic factor
a) Is needed for absorption of vitBp
b) Is required for erythropoiesis
c) Forms a protective barrier
d) Prevents digestion of stomach wall
e) Is secreted from oxyntic cells
TTFFT

12. In the stomach
a) Acetylcholine stimulates the secretion of gastrin
b) Histamine stimulates the secretion of HCl
c) Gastrin stimulates the secretion of histamine
d) Prostaglandin stimulates the secretion of HCl
e) Acetylcholine stimulates the secretion of HCl
F T T F T ***[Ref: Davidson-23rd/Box-21.3/P-767]***

13. Defective parietal cells would result in malabsorption of
a) Vitamin B_1
b) Folic acid
c) Vitamin B_{12}
d) Iron
e) Vitamin C
FFTTF

14. Stimuli that increase gastrin secretion
a) Somatostatin
b) Calcitonin
c) Increased vagal discharge
d) Luminal distension
e) VIP
FFTTF

15. Followings are compatible-PH
a) Saliva: 6-74
b) Bile (GB): 7.8-8.6
c) Brunner's gland juice: 8.0-8.9
d) Pancreatic juice: 7.0-7.4
e) Small intestinal juice: 7.5-8.0
TFTFT

Each question below contains five suggested answers- choose the <u>one best</u> response to each question (16-30)

16. Following hormone acts on sphincter of Oddi
a) PZ
b) CCK
c) Secretin
d) VIP
e) Gastrin
B

17. PPI acts on
a) H-K^+ pump
b) Na^+-K^+ pump
c) Na^+-Ca^{2+} pump
d) Na^+-H^+ pump
e) HCO^-_3-Cl-pump
A

18. Secretin acts on
a) Ductal cell of pancreas
b) Acinar cell of pancreas
c) Brush border of small intestine
d) Antral cell of stomach
e) Inhibit parietal cell
A

19. Activator enzymes of succussintrericus
a) Enterokinase
b) Trypsinogen
c) Pepsin
d) Luminal pH
e) Dipeptidase
A

20. Only CHO, that's digestion occurs in stomach
a) Fructose
b) Maltose
c) Galactose
d) Sucrose
e) Maltotriose
D

21. Peptides with appetite-suppressing property include
a) Cholecystokinin
b) Ghrelin
c) Glucagon-like peptide 2
d) Gatrin
e) Secretin
A (Davidson 23rd/Box-21.2/P- 772, Ganong P- 441)

22. Acidic pH of gastric juice
a) Stimulates secretion of secretin
b) Stimulates secretion of gastrin
c) Inhibits protein digestion
d) Inhibits in iron absorption
e) Inactivates pepsinogen
A [Ref: Guyton & Hall/13th/Box-63.1/P-802]

23. Bile is composed of
a) Bile acids
b) Protein
c) Cholesterol
d) Fat soluble vitamin
e) Cholecystokinin
C [Ref: Guyton & Hall/13th/Box-65.2/P-829]

24. Regardingbile salts –followings are true except
a) Are the only constituents of bile necessary for digestion of fat
b) Have characteristic parts, water soluble & fat soluble
c) Are reabsorbed mainly in the upper small intestine
d) Are derived from cholesterol
e) Stimulate bile secretion by the liver
C

25. Food intake is regulated by except
a) Thermostatic mechanism
b) Circulating level of leptin
c) Specific dynamic action of food
d) Basal metabolic rate
e) Ghrelin concentration in blood
C [Ganong P-485, Fig: 26.9]

26. Regarding the Slow waves in gut smooth muscles following are true except
a) Action potentials –
b) Due to Na-k pump
c) Phasic contraction
d) Oscillating resting potential
e) Controlled by interstitial cells of Cajal
B [Ref: Guyton & Hall/13th/P-797,798 +BRS/P-199]

27. The terminal ileum is the main site of absorption of
a) Iron
b) Glucose
c) Amino acid
d) Bile salt
e) Cupper
D [Ref: Ganong physiology/25th/T-26.1/P-477]

28. Decreased iron absorption occurs in except
a) Iron overload
b) Chronic infection
c) Decreased erythropciesis
d) Taking dietary fibre
e) Hypoxemia
E

29. Na^+ -co –transport is necessary for intestinal absorption
a) Vit-E
b) Bile salt
c) Fructose
d) Dipeptides
e) Vit-A
B

30. Pancreatic secretion
a) In response to vagal stimulation is copious, rich in HCO_3^- but poor in enzymes
b) In response to acid in the duodenum is scanty but rich in enczyme
c) In response to secrtinsecertion – low in HCO_3^-
d) Contains enzymes that convert neutral fat to fatty acid and glycerol
e) Contains enzymes that convert disaccharides to monosaccharide
D