### Memory Test - GIT Physiology\_Class Test\_Online\_Davidson\_Plus\_1

Total Mark: 100 Time: 90 Min

1. In comparison to hepatic bile, gall bladder bile is – A) Concentrated in HCO3- B) Concentrated in [H+] C) More cholesterol D) More bile salts E) Less specific gravity Answer: F, T, T, T, F Discussion: Reference: (Ref: Sembulingum 8th/Page-259)	2. Absorption of most of the- A) Iron occurs in the duodenum B) Calcium occurs in the duodenum C) Bile salt occurs in the jejunum D) Vitamin B12 takes place in ileum E) Water mainly occurs in the stomach Answer: T, T, F, T, F Discussion: Reference: (Ref: Ganong 26th/Page-477-478) (Ref: CC Chatterjee 12th/Page-439,441)
3. Factors that favor gall bladder emptying:  A) Presence of fatty food in the duodenum  B) Gastrin  C) Cholecystokinin  D) Histamin  E) Acetylcholine  Answer: T, F, T, F, T  Discussion:  Reference: (Ref: Sembulingum 8th/Page-264-265)	4. In infants, defecation often follows a meal. The cause of colonic peristalsis is A) Gastrocolic reflex B) Increased circulatory level of CCK C) Gastroculic reflex D) Enterogastric reflex E) Local reflex produced by distension of stomach Answer: F, F, T, F, F Discussion: Reference: (Ref: Ganong 26th/Page-494)
5. Increasing intestinal motility A) Gastrin B) Secretin	6. Micelle formation is necessary for the intestinal absorption of
C) Insulin D) Glucagon E) Motilin Answer: T, F, F, T Discussion: Reference: (Ref: Ganong 26th/Page-453)	A) Bile salt B) Fatty acids C) Vitamin-B12 D) Vitamin-D E) Vitamin-C Answer: T, T, F, T, F Discussion: Reference: (Ref: ABC Bio 4th/Page-133, Ganong 26th/Page-478)

#### 9. Absence of bile in the intestine causes 10. Absence of exocrine secretion of pancrease A) Prolonged prothrombin time A) Loss of weight B) Steatorrhoea B) Impaired digestion C) Defective iron absorption from the ileum C) Increased bleeding time D) Defective absorption of vitamin B12 D) Diarrhoea E) Impaired fat absorption E) Diafete melitus Answer: T, T, F, F, T Answer: T, T, F, T, F Discussion: Discussion: Reference: (Ref: Sembulingum 8th/Page-267,255) **Reference:** (Ref: Ganong 26th/Page-474-475) 11. At low flow rate saliva in the mouth is 12. Bile-A) Hypotonic, acidic & rich in K+ B) Hypotonic, alkaline & rich in Na+ C) Hypotonic, acidic & low in Na+ D) Hyportonic acidic & Low in K+ E) Hypertonic, alkaline & rich in K+ Answer: T, T, F, F, F Discussion: Reference: (Ref: Ganong 26th/Page-447)

### 14. Defaecation is a reflex action

- A) Which is coordinated by reflex centre's in the sacral cord
- stretch receotors in the colon?
- sympthetic autonomic nerves?
- D) Which is more likely to be initiated just after a meat than just before it?
- E) Which can be voluntarily inhibited and facilitated

Reference: (Ref: Ganong 26th/Page-493-478, Ref: Sembulingum 8th/Page-288-289, Ref: CC Chatterjee 12th/Page-434)

### reflexes are

Reference: (Ref: Sembulingum 8th/Page-243)

- D) Osmolality of the chyme.
- E) Break down products of fats.

Answer: F, T, F, T, T

Reference: (Ref: Sembulingum 8th/Page-284)

- 16. Gastric secretion A) Is enhanced by mere thought of food
- B) Is decreased by eating food
- C) Is stimulated by histamine secretion
- D) Contains factor which helps in vit absorption
- E) Is stimulated by pancreozymin

Answer: T, F, T, T, F

Discussion:

**Reference:** (Ref: Sembulingum 8th/Page-240,243)

A) Contains enzymes for digestion of fat

B) Makes cholesterol water soluble

C) It is taken up by intestine D) Bile pigment contains iron

E) Becomes less alkaline in gall bladder

Answer: F, T, T, F, T

Discussion:

Reference: (Ref: Sembulingum 8th/Page-260,262,

Ref: CC Chatterjee 12th/Page-399)

B) Whose afferent limb carries impulses from

C) Whose efferent limb travels mainly in

Answer: T, F, F, T, T

Discussion:

15. Factors that can excite the enterogastirc

13. Cephalic phase of gastric juice secretion is

A) Contraction of the duodenum.

B) Presence of irritation in duodenal mucosa.

C) Alkalinity of the duodenal chyme.

Discussion:

influenced by

C) Sight of food

B) Presence of food in mouth

D) Distention of stomach

E) Throught of food

Answer: F, T, T, F, T

A) Gastrin

Discussion:

#### 17. In the stomach

- A) Acetylcholine stimulates the secretion of gastrin
- B) Histamine stimulates the secretion of HCI
- C) Gastrin stimulates the secretion of histamine
- D) Prostaglandin stimulates the secretion of HCl

E) Acetylcholine stimulates the secretion of HCl

Answer: T, T, T, F, T

**Discussion:** Explanation: a. post ganglionic vagal fibers that innervate the G cells secretes gastrin releasing polypeptide (GRP) rather than

acetylcholine

**Reference:** [Ref: Davidson-23rd/Box-21.3/P-767]

(Ref: Sembulingum 8th/Page-242

#### 18. Increase GIT peristalsis

- A) CCK
- B) Gastrin
- C) Secretin
- D) Motilon
- E) VIP

Answer: T, T, F, T, F

Discussion:

Reference: (Ref: Sembulingum 8th/Page-293)

#### 19. Movement of large intestine is known as-

- A) Peristalsis
- B) Haustration
- C) Mass movement
- D) Segmental contraction
- E) Sacculation

Answer: T, T, T, T, F

Discussion:

**Reference:** (Ref: Ganong 26th/Page-492)

#### 20. Regarding the swallowing reflex

- A) The palate moves up to close the nasopharynx
- B) The larynx moves up to the inlet
- C) These is contraction of the upper oesophageal spincter
- D) The vocal cords become loose

E) The epiglottis has no role **Answer:** T, T, F, F, F

Discussion:

**Reference:** [Ref : Ganong/25th/498]

#### 21. Removal of terminal ileum will results

- A) Decreased absorption of amino acid
- B) Increase water content of faeces
- C) Increase fat content in faeces
- D) Decrease vitamin B12
- E) Increase enterohepatic circulation of bile

Answer: T, T, T, T, F

Discussion:

**Reference:** (Ref: Ganong 26th/Page-455,470-478)

#### 22. Salivary secretion is needed for

- A) Speech
- B) Swallowing
- C) Protein digestion
- D) Antiseptic in mouth
- E) Conditioning of food

Answer: T, T, F, T, T

Discussion:

**Reference:** (Ref: Ganong 26th, Page-447/ Sembulingum 8th/Page-231-232)

### 23. The passage of gastric contents to the duodenum may cause

- A) Copious secretion of pancreatic juice rich in bicarbonate
- B) Decreased gastric motility
- C) Contraction of the gallbladder
- D) Contraction of the sphincter of Oddi
- E) Release of pancreozymin

Answer: T, T, T, F, T

Discussion:

Reference: (Ref: Sembulingum 8th/Page-253)

#### 24. Total gastrectomy causes

- A) Haemodilution after meals
- B) Vit B12 malabsorption
- C) Grossly reduced iron absorption
- D) Malabsorption of protein
- E) Impaired fat absorption

Answer: F, T, F, T, T

Discussion:

Reference: (Ref: Bailey & Loves

27th/Page-1138-1139)

#### 25. Trypsinogen

- A) Is the inactive form of trypsin
- B) Is converted to trypsin by HCI
- C) Is converted to trypsin by enterokinase
- D) Remains as trypsinogen by trypsin inhibitor
- E) Is secreted during cephalic phase of digestion

Answer: T, F, T, T, F

Discussion:

Reference: (Ref: Ganong 26th/Page-453,

Sembulingum 8th/Page-249)

26. A 40yrs old male patient Presented to you with prolonged vomiting. His ABG shows. PH: 7.9 HCO3- 40mmol/IL PCO2: 48mmol/IL What type of ABD exits here?

- A) Metobolic acidosis
- B) Metabolic alkalosis
- C) Compensated metabolic acidosis
- D) Compensated metabolic alkalosis

E) Mixed ABD Answer: D Discussion: Reference:

27. A 48yrs old man has been unable to eat for 7days because of an obstructing lesion in the esophagus. Which of the following is the major source of fuel being oxidized by his skeletal muscle?

- A) Muscle creatine phosphate
- B) Muscle glycogen
- C) Muscle triglycerides
- D) Serum fatty acids
- E) Serum glucose

Answer: D Discussion:

Reference: (Ref: ABC Bio 4th/Page-227)

28. A mother has given a feed to her child, but after a few minutes the child defecates. This is probably due to:

- A) Enterogastric reflex
- B) Enterocolic reflex
- C) Gastrocolic reflex
- D) Gastro-oesophageal reflex
- E) Oesophagoenteric reflex

Answer: C Discussion:

Reference: (Ref: Ganong 26th/Page-494)

- 29. A patient underwent total gastrectomy because of a proximal gastric cancer. Which of the following digestive enzymes will be produced in inadequate amounts after the surgery in this patient?
- A) Amylase
- B) Chymotrypsin
- C) Trypsin
- D) Pepsin
- E) Prolastase

Answer: D
Discussion:
Reference:

- 30. Activator of salivary amylase
- A) Na
- B) Trypsin
- C) Chloride
- D) Ca

E) HCO3

Answer: C Discussion:

Reference: (Ref: Ganong 26th/Page-453)

- 31. Following digestive juices contain enzymes except one –
- A) Saliva
- B) Gastric juice
- C) Pancreatic juice
- D) Bile
- E) Intestinal juice

Answer: D Discussion:

Reference: (Ref: Ganong 26th/Page-453, CC

chatterjee 12th/page-391)

32. Following end products of digestion absorbed to portal blood except one -

- A) Glucose
- B) Amino acid
- C) Short chain fatty acid
- D) Long chain fatty acid
- E) Glycerol Answer: D Discussion:

**Reference:** (Ref: Ganong 26th/Page-476)

# 33. Hepatic bile is modified in the gallbladder. Which of the following modifications in hepatic bile takes place in the galbladder?

- A) Chloride is added
- B) Calcium is concentrated
- C) H+ ions are removed
- D) Sodium is added
- E) Water is added

Answer: B Discussion:

Reference: (Ref: Sembulingum 8th/Page-257)

#### 34. Intestinal secretions contain

- A) Potassium in a concentration similar to that in extracellular fluid
- B) Enzymes that are released when the vagus nerve is stimulated
- C) Enzymes that hydrolyze disaccharides
- D) Enzymes that hydrolyze monosaccharides
- E) Enzymes that not activate pancreatic proteolyic enzymes

Answer: C Discussion:

Reference: (Ref: Ganogn 26th/Page-453)

#### 35. Iron absorption mainly occurs in

- A) Duodenum
- B) Jejunum
- C) Terminal parts ileum
- D) Upper part is ileum
- E) Colon
  Answer: A
  Discussion:

Reference: (Ref: Ganong 26th, Page-477)

# 36. Migrating motor complex is triggered by which of the following ?

- A) Motilin
- B) NO
- c) cck
- D) Somatostatin
- E) Secretin Answer: A Discussion:

Reference: (MMC is initiated by motilin )GAN/25th

/505

#### 37. Pseudomembraneous colitis is due to

- A) Clostridium difficile
- B) Shigella
- C) Salmonella
- D) Clostridium tetani
- E) F. coli
  Answer: A
  Discussion:

Reference: (Ref: Lange Microbiology

15th/Page-134)

#### 38. Sphincter of Oddi relaxes with

- A) Cholecystokinin
- B) GIP
- C) VIP
- D) Gastrin
- E) Secretin

Answer: A Discussion:

Reference: (Ref: Ganong 26th/Page-458)

#### 39. The risk of developing gallstones increases:

- A) When cholesterol micelles are formed in the gall bladder
- B) As the bile salt: cholesterol ration increases
- C) As the lecithin: cholesterol ration increases
- D) When supplementary bile salts are taken by mouth
- E) In patients with haemolytic anaemia

Answer: E Discussion:

Reference: (Ref: Bailey & Love 27th/Page-1199)

40. The small intestine is where the most chemical digestion takes place. Which of the following is an enzyme secreted by mucosa of small intestine?

- A) Cholecystokinin
- B) Exterokinase
- C) Gastrin
- D) Lactase
- E) Secretin

Answer: D
Discussion:

Reference: (Ref: Ganong 26th/Page-453)

- 41. Triglycerides play an important role in metabolism as energy sources and transporters of dietary fat. They contain more than twice as much energy (9kcal/g) as carbohydrates and proteins. Which of the following has the highest content of triglycerides?
- A) Chlomicron
- B) High-density lipoprotein (HDL)
- C) Intermediate-lipoprotein (LDL)
- D) Low-density lipoprotein (LDL)
- E) Very-low-density lipoprotein (VLDL)

Answer: A Discussion:

**Reference:** (Ref: ABC Bio 4th/Page-196)

- 42. Vitamin B12 is the most chemically complex of all the vitamins. Vitamin B12 absorption depends on:
- A) Ca2+
- B) Fe3+
- c) HCl
- D) Intrinsic factor
- E) Transferin

Answer: D Discussion:

Reference: (Ref: Sembulingum 8th/Page-240)

- 43. Which vitamin is mostly stored in liver-
- A) Vit K
- B) Vit B6
- C) Vit B12
- D) Folic acid
- E) Vit C

Answer: C Discussion:

Reference: (Ref: Davidson 23rd/Page-850-851)

- 44. A 20 yrs old make patient come to you with upper abdominal pain nausea and dyspepsia, you have made diagnosis PUD clinically and prescribes omeprazole. Which of these pump upon which omeprezole act
- A) H+-Ca++ pump
- B) Na+-Ca++ pump
- C) H+-Na+ pump
- D) K+-Na+ pump E) H+-K+ pump
- Answer: E
  Discussion:

**Reference:** (Ref: Ganong 26th/Page-452)

- 45. A 40 years old women was brought to the accident & Emergency Department complaining at sudden onset of pain in right hypochondrium accompanied by nausea & vomiting) An abdominal ultrasound scan showed presence of gallstone) Gallstones are composed mainly of:
- A) Billirubin
- B) Bile salts
- C) calcium
- D) cholesterol
- E) lecithin **Answer:** D **Discussion:**

Reference: (Ref: Baily & Love 27th/ Page-1199)

- 46. Defecation is the act or process by which humans eliminate solid or semi-solid waste material from the digestive tract. Defection:
- A) Is an involuntary act
- B) Is initiated by stretch receptors in the wall of the small intestine
- C) Is solely controlled by spinal centres
- D) Is facilitated by assuming a standing posture to align and dilate the recto-anal junction
- E) Is facilitated by employing the valsalva manoeuvre

Answer: E Discussion:

**Reference:** (Ref: Gayton 12th/Page-771)

- 47. Glucagon like peptide-
- A) Is an anorectal hormone
- B) Stimulates glucagon release
- C) Decreases blood glucose
- D) Increases gastric motility
- E) Is secreted from terminal ileum

Answer: C Discussion:

**Reference:** (Ref: Davidson 23rd/Page-772)

- 48. In the stomach, chief cells release pepsinogen. Pepsinogen is activated by
- A) Acid PH and pepsin
- B) Cholecystokinin
- C) Chymotrypsin
- D) Grastrin and pepsin
- E) Trypsin and acid PH

Answer: A Discussion:

Reference: (Ref: Ganong 26th/Page-453)

#### 49. Trypsinogen is activated by-

- A) Hexokinase
- B) Enterokinase
- C) Fructokinase
- D) HCl
- E) Pepsinogen

Answer: B Discussion:

Reference: (Ref: Ganong 26th/Page-453)

## 50. Two basic types of electrical waves in smooth muscle of the gastrointestinal tract are:

- A) Fast waves and spikes
- B) Short and long spikes
- C) Slow waves and spikes
- D) Slow waves and fast waves
- E) Fest waves & slow waves

Answer: C Discussion:

Reference: (Ref: Gayton 12th/Page-754)