Memory Test - GIT Physiology & Metabolism_Class Test_Online_Foundation_2

Total Mark: 100
Time: 90 Min

1. Causes of conjugated hyperbilirubinaemia
A) Gilberts syndrome
B) Criglernajjar synd.
C) Dubin Johnson synd.
D) Rotors synd.
E) Pancreatitis
Answer: F, F, T, T, F
Discussion:
Reference: (Davidson box 22.17, page 860)

2. Regarding bile
A) Cotain enzyme required for digestion of fat
B) Contain unconjugated bilirubin
C) Salts make cholesterol more water soluble
D) Pigments contain iron
E) Becomes more alkaline during storage in the gall bladder
Answer: F, F, T, F, F
Discussion:
Reference: (Ref: Roddie Q No-195)

3. Defective parietal cell would result in malabsorption of
A) Vitamin B1
B) folic acid
C) Vitamin B12
D) Iron
E) Vitamin C
Answer: F, F, T, T, F
Discussion:
Reference: (Ref: Ganong 25th /Page-457,484)

4. In the colon
A) Greater amount of water is absorbed than in the small intestine
B) Mucus is secreted to lubricate the fecal contents
C) Fecal transit time is normally about 7 days

D) Fecal transit time is inversely related to fibre content
E) Bacteria normally account for about three quarter of fecal weight
Answer: F, T, F, T, F
Discussion:
Reference: (Ref: Roddie Q no.-206)

5. Regarding absorption of vitamin & mineral

A) 95% of ingested calcium is absorbed
B) Most vitamin absorbed in lower GIT
C) Phosphate& oxalate impair absorption of calcium
D) Folate absorption is Na+ independent
E) vit D play a critical role in absorption of calcium
Answer: F, F, T, T, T
Discussion: F(30-80%)FTTT
Reference: (Ref . ganong 25th page 483)

6. Regarding ghrelin
A) Reduce appetite
B) Enhance acid secretion
C) Enhance gastric emptying
D) Reduce GH secretion
E) Secreted primarily by stomach
Answer: F, T, T, F, T
Discussion:
Reference: (Ref: Ganong 25th/Page-472)

7. Regarding TCA cycle
A) Pyruvate is the substrate for TCA cycle
B) It occurs in the mitochondrial matrix
C) Does not occur in the BRC
D) Provide 24 ATP per molecule of glucose metabolism
E) Only 2 ATP is formed from substrate level oxidation
Answer: F, T, T, T, T
Discussion:
Reference: (Ref: ABC Biochemistry, Metabolism, 7th/ Page-166)

8. Swallowing is a reflex which
A) Has its reflex centre in the cervical segments of the spinal cord
B) Includes inhibition of respiration
C) Is initiated by voluntary act
D) Is dependent on intrinsic nerve network in the esophagus
E) Is more effective when the person is standing rather lying.
Answer: F, T, T, T, T
Discussion:
Reference: (Ref: Roddie Q. No-197)

9. Which of the following reflex is from gut, from spinal cord or brainstem & then back to GIT is?
A) Swallowing reflex
B) Defecation reflex
C) Gastroileal reflex
D) Gastrocolic reflex
E) Duodenocolic reflex
Answer: F, T, F, F, F
Discussion:
Reference: (Ref: Ganong 26th/Page- 493)

10. Constipation is recognized consequence of
A) Sensory denervation of rectum
B) psychological stress
C) Abnormality of autonomic nerve supply to the colon
D) A diet that leaves little unabsorbed residue in the gut
E) Overactivity of the thyroid gland as in thyrotoxicosis
Answer: T, T, T, T, F
Discussion:
Reference: (Ref: Roddie Q No. 245)

11. Factors that facilitate iron absorption
A) HCL
B) Phytate
C) Oxalate
D) Hepcidin
E) Iron deficiency
Answer: T, F, F, F, T
Discussion:
Reference: (Ref: Ganong 26th/Page-502)

12. Fates of acetyl CoA-
A) Synthesis of fatty acid
B) Synthesis of Amino acid
C) Synthesis of Keton body
D) Synthesis of Lactate
E) Oxidation in TCA cycle
Answer: T, F, T, F, T
Discussion:
Reference: (Ref: ABC Biochemistry, Metabolism, 7th/ Page-186)

13. Following act on acinar cell of pancreas
A) CCK
B) secretin
C) VIP
D) Ach
E) Bombesin
Answer: T, T, T, T, T
Discussion:
Reference: (Ref: Ganong 26th/Page- 450-454)

14. Following are common cause of acute pancreatitis
A) Gall stone
B) Post ERCP
C) Mumps infection
D) Hypercalcaemia
E) Trauma
Answer: T, T, F, F, F
Discussion:
Reference: (Davidson 21.80 box)

15. Following are correct regarding squamous cell carcinoma of skin?
A) Also known as 'rodent ulcer'
B) Cryotherapy is the treatment of choice for early cases
C) Occur on chronically sun-exposed sites, such as bald scalp, tops of ear
D) Rarely metastasises
E) Risk of SCC is increased in HIV infection
Answer: F, F, T, F, T
Discussion:
Reference: (Dav 23rd edition, P-1229-32)

16. Following are true for secretin
A) Secreted by S cell in ileum
B) Increase bicarbonate secretion by duct cell of pancreas & biliary tract
C) Its action on pancreatic duct is mediated by cGMP
D) Reduce gastric emptying
E) Stimulated by acidic chime in stomach
Answer: F, T, F, T, F
Discussion:
Reference:

17. Intestinal obstruction does not causes
A) Constipation
B) Crampy pain due to intermittent vigorous peristalsis
C) Distension due to fluid & gas proximal to obstruction
D) Hypotension
E) Vomiting which is more severe with low then with high bowel obstruction
Answer: F, F, F, F, T
Discussion:
Reference: (Ref: Roddie 6th Q. No-233)

18. Keton bodies are-
A) Acetone
B) Acetyl CoA
C) Oxaloacetale
D) Acetoacetate
E) □-hydroxybutarate
Answer: T, F, F, T, T
Discussion:
Reference: (Ref: ABC Biochemistry, Metabolism, 7th/ Page-218)

19. Lipoproteins
A) Are formed in the liver only
B) LDL is the pathogenic factor for atherosclerosis
C) HDL carries cholesterol from liver to peripheral tissue
D) Are molecular complex of lipids and specific proteins
E) HDL helps to prevents coronary artery disease
Answer: F, T, F, T, T
Discussion:
Reference: (Ref: ABC Biochemistry, Metabolism, 7th/ Page-232)

20. Metabolic fuel for neurons are
A) Glucose
B) Fatty acid
C) Amino acid
D) Keton body
E) Acetyl CoA
Answer: T, F, F, T, F
Discussion:
Reference: (Ref: ABC Biochemistry, Metabolism, 7th/ Page-148)

21. Regarding digestive juice
A) Liver bile is more acidic then GB bile
B) PH of brunner gland secretion is 8-8.9
C) PH of gastric juice is 1-3.5
D) Saliva is hypertonic & acidic
E) Gastric juice is secreted by three phase
Answer: F, T, T, F, T
Discussion:
Reference: (Ref: Ganong 26th/Page- 447-453)

22. secretin differs from CCK-PZ in that it
A) Is formed by mucosal cells in upper small intestine
B) Stimulates the pancreas to secrete a juice which is rich in digestive enzyme
C) Stimulates the pancreas to secrete a watery alkaline juice
D) Has less effect on GB smooth muscle
E) Decrease gastric motility
Answer: F, F, T, T, T
Discussion:
Reference: (Roddie q no 477)

23. Which of the following inhibit gastric acid secretion?
A) Histamin
B) Calcitonin
C) Gastrin
D) GIP
E) Sympathetic stimulation
Answer: F, T, F, T, T
Discussion:
Reference: (Ref: Ganong 25th/Page-470)

24. Which of the following statement relating to gastric acid secretion are true?
A) In parietal cell carbonic anhydrase generate hydrogen ions which are then actively secreted

B) Cephalic phase is abolished following truncalvagotomy
C) Intestinal phase accounts for 60% gastric acid secretion
D) Histamin acts in paracrine manner on H2 receptor
E) H2 receptor antagonist will not completely abolished gastric acid production
Answer: T, T, F, T, T
Discussion:
Reference: (Ref: Ganong 26th/Page- 447)

25. Which one is the activator of salivary & pancreatic amylase?
A) Na+
B) CL-
C) HCL
D) k+
E) Trypsin
Answer: F, T, F, F, F
Discussion:
Reference: (Ref: Ganong 25th/Page 461)

26. 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
Answer: A
Discussion:
Reference: [Ref: Guyton & Hall/13th/Box-63.1/P-802]

27. Activator enzymes of succus entericus
A) Enterokinase
B) Trypsinogen
C) Pepsin
D) Luminal pH
E) Dipeptidase
Answer: A
Discussion:
Reference: (Ref: Ganong 26th/Page- 469)

28. Bile is composed of
A) bile acids
B) protein
C) cholesterol
D) fat soluble vitamin
E) cholecystokinin
Answer: C
Discussion:
Reference: [Ref: Guyton & Hall/13th/Box-65.2/P-829]

29. Common features of fat soluble vitamins are except
A) Isoprene derivatives
B) Absorption is linked to that of dietary fat
C) Synthesized endogenously
D) Transported in blood by some proteins
E) Vitamin K Act as enzyme cofactors
Answer: C
Discussion:
Reference: [Ref: ABC Biochemistry-5th/Page-524]

30. Defective parietal cells would result in malabsorption of
A) Vitamin B1
B) Folic acid
C) Vitamin B12
D) Calcium
E) Vitamin C
Answer: C
Discussion:
Reference: [Ref: Ganong 25th P-457, 484]

31. Following hormone acts on sphincter of Oddi

A) PZ
B) CCK
C) Secretin
D) VIP
E) Gastrin
Answer: B
Discussion:
Reference: (Ref: Ganong 26th/Page- 454)

32. Following vitamins have important role in TCA cyle
A) Riboflavine
B) Pentothenic acid
C) Niacin
D) Biotin
E) Thiamine
Answer: D
Discussion:
Reference: [Ref: ABC Biochemistry-5th/P-157]

33. Food intake is regulated by the following except
A) Thermostatic mechanism
B) Circulating level of leptin
C) Specific dynamic action of food
D) Basal metabolic rate
E) Ghrelin concentration in blood
Answer: C
Discussion:
Reference: [Ref: Ganong /P-485, Fig: 26.9]

34. Recognized features of vitamin B12 deficiency include except
A) Degeneration of anterior spinal cord
B) Paresthesia
C) Optic atrophy
D) SCD
E) Dorsal column lesion
Answer: A
Discussion:
Reference: [Ref: ABC Biochemistry-5th/Page-540)

35. In the stomach ---not compatible statement
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: D
Discussion:
Reference: (Ref: Ganong 26th/Page- 448)

36. Increased CK-MB relative to total creatine kinase is seen in
A) Rhabdomyolysis
B) Muscle necrosis
C) Polymyositis
D) Acute myocardial infarction
E) Statin therapy
Answer: D
Discussion:
Reference: (Ref: ABC Biochemistry, 7th/Page-585)

37. Liver stores the following vitamins except
A) A
B) K
C) E
D) B12
E) D
Answer: C
Discussion: (Explanation: Storage function of liver: Vitamins: i. large amount = A,B12,D. ii. Small amount = K, folate. Minerals = iron (ferritin, haemosiderin) Copper {Other Substance stored Folate, Copper, Iron, Ferritin, and Haemosiderin)
Reference: (Ref: Ganong 26th/Page- 500)

38. Only CHO, that's digestion occurs in stomach

A) Fructose
B) Maltose
C) Galactose
D) Sucrose
E) Maltotriose
Answer: D
Discussion:
Reference: (Ref: Ganong 26th/Page- 469)

39. Peptides with appetite-suppressing property include
A) Cholecystokinin
B) Ghrelin
C) Glucagon-like peptide 1
D) Gatrin
E) Secretin
Answer: A
Discussion:
Reference: (Ganong 26th/P- 441)

40. PPI acts on
A) H-K+ pump
B) Na+-K+ pump
C) Na+-Ca2+ pump
D) Na+-H+ pump
E) HCO-3-Cl-pump
Answer: A
Discussion:
Reference:

41. Reducing sugars in urine include except
A) Glucose
B) Fructose
C) Sucrose
D) Galactose
E) Lactose
Answer: C
Discussion: Reducing sugars Posses free aldehyde or ketone group in haier structure Monosaccharides- Glucose, fructose, gelaclose Dissachanides- Maltose, lactose Note: Sucrose & treahalose are not reducing sugar
Reference: (Ref: ABC Biochemistry, Metabolism)

42. Regarding bile 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
Answer: C
Discussion:
Reference: (Ref: Ganong 26th/Page- 474)

43. 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
Answer: B
Discussion:
Reference: [Ref: Guyton & Hall/13th/P-797,798 +BRS/P-199]

44. 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
Answer: A
Discussion:
Reference: (Ref: Ganong 26th/Page- 458)

45. Stress causes
A) Lysosomal stabilization
B) Protein mobilization
C) Decrease ACTH secretion
D) Gluconeogenesis
E) Glucose mobilization
Answer: C
Discussion: Explanation: by excresion of corticosteroid b) Proteolysis occurs c) relase of cafecholamine aldosteron, ACTH, GH, cortisol d) To supply glucose to brain, sk muscle
Reference: [Ref: Guyton & Hall/13th/P-783]

46. The terminal ileum is the main site of absorption of
A) Iron
B) Glucose
C) Amino acid
D) Bile salt
E) Cupper
Answer: D
Discussion:
Reference: [Ref: Ganong physiology/25th/T-26.1/P-477]

47. Type A lactic acidosis is found in
A) Malignancy
B) Mitochondrial dysfunction
C) Heart failure
D) Alcohol intoxication
E) Acute liver failure
Answer: C
Discussion: Types of lactic acidosis: 1. Type 1(A): Here hypoxia causes increased lactic acid production due to anerobic glycolysis and hypoxia may be: a) Absolute hypoxia, e.g. Hypoxic hypoxia, shock, heart failure, pulmonary edema, respiratory failure, sepsis etc. b) Relative hypoxia, e.g. Seizure, severe exercise, etc. 2. Type II(B): Here there is impairment of lactic acid metabolism in the setting of adequate tissue oxygen supply. a) Mitochondrial dysfunction (respiratory chain dysfunction). Here reduced coenzyme (NAD2H) fails to be oxidized and NAD2H concentration increases which converts pyruvic acid to lactic acid. b) Diabetes mellitus c) Malignancy d) Hepatic failure e) Drugs and toxins, e.g. alcohol, biguanides etc.
Reference: [Ref: ABC Biochemistry-5th/P-321]

48. Na+ Co-transport is not necessary for the intestinal absorption of
A) Amino acid
B) Bile salts
C) Glucose
D) Galactose
E) Folic acid
Answer: E
Discussion:
Reference: (Ref: Ganong 26th/Page- 469-470)

49. Niacin deficiency leads to development of

A) Scurvy
B) Pellagra
C) Peripheral neuropathy
D) Beriberi
E) Osteomalacia
Answer: B
Discussion:
Reference: [Ref: ABC Biochemistry/5th/Page-536]

50. Vitamins acting as co-enzymes in different biochemical reactions except
A) vitamin C
B) vitamin D
C) vitamin K
D) riboflavin
E) cyanocobalamin
Answer: B
Discussion:
Reference: [Ref: ABC Biochemistry 5th /P- 464]