Memory Test - GIT Physiology & Metabolism, Renal System Body Fluid_Class Test_Crash_Foundation

Total Mark: 100
Time: 90 Min

1. Acute Dilutional hyponatremia occurs in
A) Diabetes insipidus
B) SIADH
C) ARF
D) DM
E) Psychogenic polydipsia
Answer: F, F, T, T, T
Discussion:
Reference: [Ref: ABC Biochemistry 5th/P-369]

2. Agents causing relaxation of mesangial cells
A) PDGF
B) ANP
C) Dopamine
D) PGE2
E) cAMP
Answer: F, T, T, T, T
Discussion:
Reference: (Ref: Ganong-25th Page-678)

3. ECG finding of hypokalemia
A) Decrease P-R interval
B) ST-segment elevation
C) Depressed U wave
D) Progressive fluttering of T wave
E) Increase amplitude of P wave
Answer: F, F, F, T, T
Discussion: F (prolongation) F (Depression) F (Prominent) TT
Reference: [Ref: Vision 9th Page-324]

4. Factor stimulates gastric emptying are
A) Fat, CHO, acid in duodenum
B) Peptide Y
C) Gastrin
D) Secretin
E) CCK
Answer: F, F, T, F, F
Discussion:
Reference: [Ref : Ganong/25th/500]

5. Factors increasing glomerular filtration rate (GFR) are
A) Increased plasma colloidal osmotic pressure
B) Increased filtration coefficient
C) Sympathetic stimulation
D) Dehydration
E) Increased arterial blood pressure
Answer: T, T, F, F, F
Discussion:
Reference: [Ref/Ganong/25th/P-679]

6. Metabolic acidosis with normal anion gap
A) Renal failure
B) Diarrhea
C) Ureterosigmoidostomy
D) Acetazolamide
E) NH4Cl ingestion
Answer: F, T, T, T, T
Discussion: F(Increased anion gap) TTTT
Reference: (Ref: vision 9th , Page-335)

7. Metabolic effects of pyloric stenosis
A) Metabolic alkalosis
B) Hypocalaemia
C) Hyponatraemia
D) Hypocalcaemia
E) hypochloraemia
Answer: T, T, T, T, T
Discussion:
Reference: [Ref: B&L/27th/P-1130]

8. Metabolic function of kidney
A) Transamination
B) Deamination
C) Glycogenesis
D) Gluconeogenesis
E) Glycogenolysis
Answer: T, T, F, T, F
Discussion:
Reference: (Ref: Guyton/13th/ P-322)

9. Metabolic pathway occurring in mitochondria are
A) Pentose phosphate pathway
B) Ketogenesis
C) Reduction of pyruvate
D) Fatty acid synthesis
E) □-oxidation of fatty acids
Answer: F, T, F, F, T
Discussion:
Reference: [Ref: ABC Biochemistry/5th/P-222]

10. Omega 6 fatty acids are
A) Linoleic acid
B) Linolenic acid
C) Oleic acid
D) Arachidonic acid
E) Palmitic acid
Answer: T, F, F, T, F
Discussion:
Reference: [Ref: ABC Biochemistry/5th/P-63]

11. Pancreatic juice –
A) COntain glucagons
B) Contain enzyme for digestion of all major foodstuffs
C) Initially secretion is under physical control

D) Is rich bicarbonate
E) Cl- Conc decreases only when secretion is increased
Answer: F, T, F, T, F
Discussion:
Reference: [Ref: Ganong 25th /P-460-62]

12. Regarding erythropoietin, true statements are
A) In adult, more than 90% comes from kidney
B) Also extracted from spleen & salivary glands

C) When renal mass is reduced, the liver compensates the situation
D) Produced by interstitial cells in the peritubular capillary bed of the kidney & veins of the liver
E) It is a circulating glycoprotein that contains 165 AA
Answer: F, T, F, F, T
Discussion: (85%)TFF(Perivenous hepatocytes) T
Reference: (Ref: Ganong/25th/ P-706)

13. Regarding hormones of GIT -
A) Ghrelin secreted from stomach increase appetite
B) Peptide YY decrease appetite
C) Secretin increases insulin secretion
D) GIP inhibit insulin secretion
E) CCK increases motility
Answer: T, T, F, F, T
Discussion:
Reference:

14. Regarding iron absorption-
A) Mainly occurs in lower jejunum
B) Stimulated by phytic acid & phosphate
C) DMT helps in Fe transport from epithelial cell to blood
D) Fe2+ form is absorbed
E) Vitamin C inhibits Fe absorption
Answer: F, F, F, T, F
Discussion:
Reference: [Ref : Ganong/25th/483]

15. Regarding Micturition reflex
A) Higher center keeps the micturition partially inhibited
B) Its an autonomic spinal cord reflex
C) PONs acts as a inhibitory center
D) Frontal cerebral cortex acts as awareness of fullness of bladder
E) External sphincter of bladder contrall by S2-4 nerve
Answer: T, T, F, F, T
Discussion: (facilatory) F(sensory) T
Reference: (Ref: Guyton/13th/ P-330)

16. Skin changes may result from deficiency of

A) Zinc
B) Vitamin D
C) Vitamin A
D) Pyridoxine
E) Fluoride
Answer: T, F, T, F, F
Discussion:
Reference:

17. Substances having antioxidant effects are
A) Selenium.
B) Vitamin A.
C) Vitamin K.
D) Vitamin E.
E) Thiamin.
Answer: T, T, F, T, F
Discussion:
Reference: [Ref: Ganong 25th /P-492]

18. Thirst center stimulated by-
A) ADH
B) Angiotensin II
C) Aldosterone
D) Ranin
E) eANF
Answer: T, T, F, F, F
Discussion:
Reference: [Ref: Guyton/Ed-13th/P-384]

19. Transcellular fluid: -
A) Peritoneal fluid
B) Interstital fluid
C) Plasma
D) Oedematous fluid
E) Aqueous huymor
Answer: T, T, F, F, T
Discussion:
Reference: (Ref: Guyton/13th/ P-306)

20. Which hormones causes increase small intestinal motility?
A) CCK
B) Glucagon
C) Secretin
D) Serotonin
E) Insulin
Answer: T, F, F, T, F
Discussion:
Reference: [Ref: Ganong 25 th/P-502]

21. Absorption of dietary fat
A) Can only occur after the neutral fat has been split into glycerol and fatty acids.
B) Involves fat uptake by both the lymphatic and blood capillaries.
C) Is impaired following gastrectomy.
D) Is required for normal bone development.
E) Is required for normal blood clotting.
Answer: F, T, T, T, T
Discussion: F (Unsplit neutral fat can be absorbed if emulsified into sufficiently small particles.)T T T T
Reference: [Ref: Ganong 25th /P-482-83]

22. Hexose monophosphate shunt generates
A) NADPH
B) FADH
C) NADH
D) GTP
E) Pentose sugar
Answer: T, F, F, F, T
Discussion:
Reference:

23. 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]

24. Respiratory chain impairment is associated with
A) Hypoxic cell injury
B) Lactic acidosis
C) Mitochondrial myopathy
D) Phenyl ketonuria
E) Essential fructosuria
Answer: T, T, T, F, F
Discussion:
Reference:

25. Substances completely reabsorbed by renal tubule
A) Amino acid
B) Urea
C) Glucose
D) Vitamins
E) Acetoacetate ions
Answer: T, F, T, T, T
Discussion:
Reference: (Ref: Vision Physiology 9th P-278)

26. . HDL is synthesized & secreted from
A) Kidney
B) Intestine
C) Gall bladder
D) Brain
E) Adipose tissue
Answer: B
Discussion:
Reference:

27. After vomiting which of the followings will not be increased?
A) Vasopessin
B) Aldosterone
C) Norepinephrine
D) Angiotensin-II
E) ANP
Answer: E
Discussion:
Reference: (Ref: Ganong/ 25th /P-706)

28. Aldosterone exert its greatest effect-
A) Bowmen's capsule
B) PCT
C) DCT
D) Loop of Henle
E) Cortical collecting duct
Answer: E
Discussion:
Reference: (Ref Ganong 25th page-692)

29. Atrial natriuretic peptide decreases the following except
A) GFR
B) Renin secretion
C) Aldosteron secretion
D) NaCI reabsorption by collecting duct
E) ADH secretion
Answer: A
Discussion:
Reference:

30. Duodenal mucosa is protected from the action of acid and pepsin by:
A) Reduced secretion of bicarbonate
B) Secretion of brunner's glands
C) Hyperplasia of duodenal mucosa
D) Stimulation of sympathetics
E) IgA
Answer: B
Discussion:
Reference:

31. During fasting condition following preferred fuel are correct except
A) Brain is glucose
B) Adipose tissue is ketones
C) Cardiac muscle is fatty acids and ketones
D) Liver is glucose and amino acid
E) Erythrocyte is glucose
Answer: B
Discussion:
Reference: [Ref: ABC Biochemistry-5th/P-138]

32. In the presence of vasopressin, the greatest fraction of filtered water is absorbed in the
A) Proximal tubule
B) Loop of Henle
C) Distal tubule
D) Cortical collecting duct
E) Medullary collecting duct
Answer: A
Discussion:
Reference: [Ref: Ganong 25th/P-693]

33. Iron is absorbed occurs mainly in
A) Stomach
B) Duodenum
C) Jejunum
D) Ileum
E) Colon
Answer: B
Discussion:
Reference: [Ref: Ganong 25th /P-484]

34. Most appropriate marker for assessing liver synthetic function
A) S. bilirubin
B) SGOT
C) SGPT
D) Prothrombin time
E) S. albumin
Answer: D
Discussion:
Reference:

35. Osmotic diuresis occurs in
A) Diabetes insipidus
B) Uncontrolled diabetes mellitus
C) High intake of water
D) High intake of protein
E) Excess alcohol intake
Answer: B
Discussion: (Ref: ABC Bio 7 th /Page-299)
Reference: (Explanation: rest are water diuresis)

36. Patient with exaggerated planter response and loss of ankle reflex. What is the cause-
A) Vit-B1 deficiency
B) Vit-B6 deficiency
C) Vit-B12 deficiency
D) Vit-E deficiency
E) Vit-K deficiency
Answer: C
Discussion:
Reference: [Ref: Ganong 25th /P-492]

37. Plasma osmolarity is mainly maintained by
A) K
B) Na
C) Cl-
D) Glucose
E) Ca
Answer: B
Discussion: [Explanation: about 90%]
Reference: (Ref: ABC Bio 7th /Page-3,4,7,10)

38. Rate limiting enzyme for glycogenesis
A) Glucose synthase
B) Glycogen synthase
C) Phosphofructokinase
D) Glucokinase
E) Hexokinase
Answer: B
Discussion:
Reference: [Ref: ABC Biochemistry-5th/P-168]

39. The commonest cause of SIADH is-
A) Idiopathic
B) Tumours
C) Anticonvulsant
D) TB
E) Psychosis
Answer: B
Discussion:
Reference: (Ref: Ganong/ 25th /P-698)

40. The oxyntic cells of stomach secrete
A) Pepsin
B) Intrinsic factor
C) Gastrin
D) Pepsinogen
E) Amylase
Answer: B
Discussion:
Reference: [Ref: Ganong 25th /P-456]

41. Transmembrane potassium Efflux occurs by
A) Acidosis
B) Insulin
C) Aldosterone
D) Alkalosis
E) Acute potassium excess
Answer: A
Discussion: Explanation: factor regulating transmembrane potassium are: - glucagon - □ blocker - acidosis - □- agonist - acute potassium deficit - ECF hyperosmolarity
Reference: (Ref: ABC Bio 7th /Page-347)

42. Triglycerides play an important role in metabolism as energy sources and transporters of dietary fat. They contain more than twice as much energy (9 kcal/g) as carbohydrates and proteins. Which one of the following has the highest content of triglycerides?
A) Chylomicron
B) High-density lipoprotein (HDL)
C) Intermediate-density lipoprotein (IDL)
D) Low-density lipoprotein (LDL)
E) Very-low-density lipoprotein (VLDL)
Answer: A
Discussion: Chylomicron Chylomicrons are large lipoprotein particles (having a diameter of 75-1200 nm) that are created by the absorptive cells of the small intestine. Chylomicrons transport exogenous lipids to liver, adipose, cardiac and skeletal tissue where they are broken down by lipoprotein lipase. The chylomicrons are released by exocytosis from enterocytes into lacteals — lymphatic vessels originating in the villi of the small intestine — and are then secreted into the bloodstream at the thoracic duct's connection with the left subclavian vein. Nascent chylomicrons are primarily composed of triglycerides (85%) and contain some cholesterol and cholesteryl esters. The main apolipoprotein component is apolipoprotein B-48 (ApoB-48).
Reference:

43. Which element causes hair color with weight loss
A) Mn
B) Mo
C) Zn
D) Fe
E) As
Answer: A
Discussion:
Reference: [Ref: Ganong 25th /P-492]

44. Which is not feature of malabsorption in blood biochemistry
A) Low serum zinc
B) Hypomagnesaemia
C) Hypocalcaemia
D) Hypophosphatemia
E) Low blood glucose
Answer: E
Discussion:
Reference: (Ref: Davidson's 23rd, Page-785)

45. Which of the following cell type acts as a Chemoreceptor?
A) Juxtaglomerular cells
B) Mesangial cells
C) Bowmen's capsule
D) Macula Densa
E) Peritubular capillary
Answer: D
Discussion:
Reference: (Ref Ganong25th, P-702)

46. Which of the following is not likely to happen if the ileum of a patient is completely resected?

A) Deficiency of fat content of the stool
B) Extracellular fluid volume deficiency
C) Increased iron absorption
D) Increased calcium absorption
E) Vitamin B12 deficiency
Answer: E
Discussion:
Reference:

47. Which of the following is the site of Na+–bile acid cotransport?
A) Gastric antrum
B) Gastric fundus
C) Duodenum
D) Ileum
E) Colon
Answer: E
Discussion: Explanation: Bile salts are recirculated to the liver in the enterohepatic circulation via a Na+–bile acid cotransporter located in the ileum of the small intestine
Reference:

48. Which of the following renal functions will be assessed if you are measuring the urine specific gravity?
A) Blood flow
B) Concentration
C) Filtration
D) Reabsorbtion
E) Secretion
Answer: B
Discussion:
Reference: (SBAs Pathology/Q-9.5/P-130)

49. Which one of the apical transporters is present in the collecting duct
A) Na/glucose CT
B) Na/Lactate CT
C) K+ channels
D) Na+ channels
E) Na/H excharge
Answer: D
Discussion:
Reference: [Ref: Ganong 25th/P-680]

50. Which one of the followings has the lowest clearance value?
A) Urea
B) Inulin
C) Creatinine
D) PAH
E) Glucose
Answer: E
Discussion:
Reference: [Ref: Ganong 25th/P-677]