بسم الله الرحمن الرحيم

ZOO 302 Midterm MCQ's File

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1. Which of the following has gizzard
   a) lizards b) snakes c) turtles d) crocodile
2. Non-ruminant herbivores, eat some of their own feces to cope up the deficiency of vitamins. Examples
   a) horse b) rabbit c) mice d) mice and rabbit
3. The pancreatic duct open into
   a) ileum b) jejunum c) duodenum d) stomach
4. Which of the following is longest
   a) large intestine b) stomach c) small intestine d) esophagus
5. All the following are ruminant mammals i.e chew their cud, except
   a) sheep b) deer c) horse d) cows
6. The bird's gizzard develops from the
   a) posterior part of the stomach b) anterior part of the stomach
   c) ventriculus d) posterior part of the stomach and ventriculus
7. Spleen, liver and red marrow phagocytized RBCs to form
   a) digestive enzyme b) bile pigments
   c) hemoglobin d) bile
8. Which of the following mammals is not an omnivore
   a) pigs b) sheep c) raccoons d) bears
9. The innermost layer of the GI tract is the
   a) submucosa b) mucosa c) muscularis externa d) mascularis interna
10. The vertebrate stomach secretes_____ that digest food
    a) acid b) mucus c) both a and b d) enzyme
11. Deposit feeders simply swallow large quantities of
    a) sand and soil b) mud, soil, sand, organic matter
    c) mud and soil d) sand and organic matter
12. Human small intestine has a total surface area of approximately
    a) 200 m^2 b) 300 m^2 c) 400 m^2 d) 500 m^2
13. Monosaccharides and amino acids are absorbed into blood capillaries by
    a) diffusion b) active transport c) both a and b d) facilitated transport
14. Which group of animals have incomplete digestive system
    a) cnidarians b) arthropods c) aschelminths d) annelids

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15. Invertebrates that evolved macroherbivory include all except
    a) arthropods b) mollusks c) sea urchins d) nematods
16. Hibernation may last for days, weeks or months. This depends on the following factors except
    a) ambient temperature b) time of the year c) species d) scarcity of food
17. Which of the following micronutrients is the component of bone and teeth and prevents tooth decay as well
    a) cobalt b) manganese c) fluorine d) selenium
18. Which of the following cells are found in the stomach that secretes pepsinogens
    a) parietal cells b) goblet cells c) chief cells d) stomach cells
19. Which of the following substances stimulate pancreatic juice production
    a) gastrin b) secretin c) enterkinase d) HCL
20. The purpose of large intestine is to absorb
    a) water b) salts c) both a and b d) products of digestion
21. Which of the following are not suspension feeders?
    A) baleen whale b) bivalve mollusks c) jelly fishes d) brachiopods
22. Which of the following is false
    a) peristalsis is one way motion b) peristalsis is a voluntary activity
    c) segmentation mainly occurs in small and large intestine
    d) segmentation occurs due to rhythmic contraction of longitudinal muscles
23. Which of the following animals are thermo regulators?
    A) insects b) amphibians c) fishes d) birds
24. The first part of the large intestine is the
    a) ascending colon b) rectum c) caecum d) sigmoid colon
25. The stomach of a bivalve mollusk contains a crystalline style, gastric shield and
    a) diverticulated region b) typhlosole c) crop d) digestive cecum
26. As food enters the _____ the rotating style and the enzymes released by the gastric shield mechanically and enzymatically break it down
    a) stomach b) esophapus c) hind gut d) midgut
27. Deficiency of which vitamin has been associated with enamel defects and increased risk of dental careis?
    A) vitamin A b) vitamin C d) vitamin D d) folic acid
28. In ciliated protozoan, transport and digestion is carried out in
    a) cytoplasm b) cytopharynx c) food vacuole d) contractile vacuole
29. After bolus formation its is pushed back of the mouth by the action of
    a) tongue b) muscle of the pharynx c) both a and b d) palate
30. A person can survive without gallbladder
    a) True b) false
31. Which is incorrect match
    a) sessile opportunities- polychaetes b) lurking predators- praying mantis
    c) herbivore- gross hopper d) motile stalkers- squids
32. All the following organisms are heterotrophs except
    a) fungi b) birds c) reptiles d) rose

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33. Which vitamin is synthesized from tryptophan?
    A) niacin b) biotin c) pyridoxine d) folic acid
34. Which of the following pigments are present in bile?
    A) bilverdin b) bilrubin c) both a and b d) carotene
35. All of the following are the most successful terrestrial invertebrates except
    a) insects b) spiders c) cray fish, lobsters d) centipedes
36. The example of a nonparasitic multicellular animal that lack mouth and digestive system and absorb nutrients across their body surface is
    a) gutless bivalve b) progonophoran worm
    c) progophoran worm and gutless bivalve d) chilomonas
37. Following vitamins form the part of coenzymes needed for the oxidation of food components except
    a) cobalamin b) biotin c) niacin d) pantothenic acid
38. Which of the following enzymes digests proteins into peptides and amino acids?
    A) amylase b) chymotrypsin c) lipase d) nuclease
39. Which of the following is not the function of the oral cavity?
    A) grinding of food b) digestion c) smelling of food d) lubrication
40. Normal human body temperature is
    a) 36-38 C b) 46-48 C c) 26-28 C d) 56-58 C
41. Nutrition includes all the following processes to meet its metabolic needs except
    a) ingestion b) digestion c) absorption d) excretion
42. Which of the following structures is the common passageway for both food and air?
    A) pharynx b) nasals c) esophagous d) pharynx and nasals
43. The ruminant stomach provides on opportunity for large numbers of microorganisms to digest
    a) cellulose walls of grass b) starch c) fats d) protein
44. In vertebrates excess nitrogen is produced in the form of the following compounds except
    a) ammonia b) urea and uric acid c) creatinine d) nitric oxide
45. The ability of an organism to maintain the internal environment(physical and chemical conditions) of the body within limits that allow it to survive is called
    a) osmoregulation b) homeostasis
    c) osmoconformation d) chemical balance
46. The amount of energy required to raise the temperature of 1 g of water to 1 C is called
    a) calorie b) joule/mole c) joule d) horse power
47. The protonephtidia are the simplest among nephridia. These are found in all following except
    a) flatworms b) rotifers c) larval mollusks d) larval insects
48. Diarrhea, vomting, abdominal pain, attacks after eating contaminated food. Which is the disease?
    A) dysepesia b) food poisning c) mal nutrition d) scurvy
49. Which of the following is monosaccharide?
    A) sucrose b) lactose c) galactose d) maltose
50. How many degrees of piles are?
    A) 2 b) 3 c) 4 d) 5

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51. A speceliazed sub- cellular structure involved in osmoregulation is called
    a) food vacuole b) contractile vacuole c) radiating canals d) vacuoles
52. Which of the following converts pepsinogen to pepsin in the stomach?
    A) mucus b) gastrin c) HCL d) chief cells
53. Fishes and amphibians belong to which of the following groups
    a) endotherms b) homeotherms c) ectotherms d) heterotherms
54. All the following are toothless vertebrates except
    a) frog b) turtles c) baleen whales d) birds
55. Which of the following vitamins is synthesized from carotenes, stored in liver and unstable in light?
    A) vitamin A b) vitamin B c) vitamin D d) vitamin E
56. The homeostatic thermostat that facilitates the process of thermoregulation in man is present in
    a) cerebrum b) thalamus c) hypothalamus d) medulla oblongata
57. Following are the materials present in the fecal matter except
    a) fattay acids b) metabolic wastes c) bie pigments
58. The vitamin that promotes development of teeth and bones as well as promotes of Ca and P
    a) vitamin D b) biotin c) folic acid d) niacin
59. Food is ground by means of _____ teeth into smaller pieces
    a) molar b) premolar c) canine d) incisors
60. The glandular systems associated with the digestive tract in most vertebrates include
    a) liver b) pancreas c) salivary glands d) all
61. The function of the ileum is mainly to absorb bile salts, and any products of digestion that were not absorbed by the jejunum. The vitamin that is absorbed is
    a) B 1 b) B 6 c) B2 d) B 12
62. Long, spiny tongue for gathering insects and grubs ants is present in
    a) snakes b) frog c) woodpecker d) pangolin
63. Which of the following enzymes digests proteins into peptides and amino acids
    a) chymotrypsin b) amylase c) lipase d) nucleases
64. Which of the following causes about dyspepsia is incorrect?
    A) excessive acidly in stomach b) eating too much fibrous food
    c) faulty function of stomach and intestine
    d) insufficient quantity of bile secretions
65. Normal movement of muscles in the intestine is called
    a) antiperistalsis b) segmentation c) peristalsis d) b and c
66. How many parts of small intestine are
    a) one b) two c) three d) four
67. Which of the following animals swallow pebbles to faciliatate grinding of food
    a) sparrow b) fool c) pigeon d) all
68. Which of the hardest part of tooth?
    A) enamel b) pulp c) dentine d) cementum
69. Which of the following chemicals is released by the pancreas during and just after a meal?
    A) glycogen b) glucagon c) insulin d) pepsin

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70. Where is the liver is situated in the body?
    A) beside the pancreas b) above stomach c) below diaphragm
71. The ruminat stomach provides an opportunity for large numbers of microorganisms to digest
    a) protein b) stomach c) cellulose walls of grass d) fats
72. In ruminants there are four chambers of the stomach. Which part is said to be true stomach?
    A) abomasum b) omasum c) reticulum d) rumen
73. The main bulk of tooth forms the
    a) pulp b) dentine c) enamel d) cementum
74. Pick the incorrect statement
    a) most of the mammalian GI tract has the same an atomical structure along its entire length
    b) The submucosa contains connective tissue, blood, and lymphatic vessels
    c) serosa is the innermost layer of GI tract
    d) peristalsis and segmentation are brought about by intestinal muscles
75. All the following enzymes are produced by pancreas except
    a) amylase b) chymotrypsin c) lipase d) pepsin
76. During the process of swallowing the opening of the wind pipe is closed by
    a) glottis b) epiglottis c) soft palate d) uvula
77. The hormones that control the cavity of the GI tract
    a) gastrin b) secretin c) both a and b c) rennin
78. In ruminant there are four chambers of the stomach. Which part is said to be true stomach?
    A) omasum b) abosum c) rumen d) reticulum
79. Which of the following converts pepsinogen to pepsin in the stomach?
    A) mucus b) gastrin c) HCL d) chief cells
80. The structures which do not contribute to digestion are the
    a) esophagus b) pharynx c) buccal cavity d) esophagus & pharynx
81. Stomach secretes substances (enzymes, mucus, and HCL) that start the digestion of
    a) carbs b) proteins c) fats d) vitamins
82. Which of the following cells produces HCL in human stomach?
    A) beta cells b) mucous cells c) parietal cells d) chief cells
83. Longest part of small intestine
    a) duodenum b) ileum c) colon d) cecum
84. Slowest peristalsis occurs in
    a) rectum b) colon c) small intestine d) esophagus
85. In tuberllarins, the chief nitrogenous waste that diffuses out into surrounding water is the
    a) ammonia b) urea c) urea and ammonia d) uric acid
86. The way an animal gathers food, the types of food it eats, and the way it digests that food usually reflect
    a) oral cavity (mouth) b) intestines
    c) teeth d) oral cavity(mouth), teeth and intestines
87. Which of the following is disaccharides
    a) sucrose b) fructose c) galactose d) glucose

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88. Insects having tube-like mouthparts that enable them to suck up plant fluids include following except
    a) moths b) house fly c) butterflies d) aphids
89. The symptoms such as loss of appetite due to the fear of becoming obese, Fear is not diminished even when weight is dropped to dangerous level. Which disease comes in mind?
    A) anemia b) anorexia nervosa c) bulimia nervosa d) scurvy
90. The sterols are required for the synthesis of
    a) thyroxin b) insulin hormone c) steroid hormones d) all
91. The most concentrated source of food energy are
    a) carbs b) proteins c) fats d) proteins
92. The final act of digestion, by which organisms eliminate solid, semisolid or liquid waste material from the digestion tract via the anus is called
    a) defecation b) elimination c) secretion d) excretion
93. Which is not the correct match?
    A) carbs- glucose b) fats- fatty acids
    c) proteins- amino acids d) vitamins- glycerol
94. Suspension feeding strategy involves the following steps except one
    a) transport of water past the feeding structure
    b) feeding on sessile planktons
    c) removal of nutrient from the water
    d) transport of the nutrients to the mouth of the digestive system
95. The structures which do not contribute to digestion are the
    a) esophagus b) pharynx c) buccal cavity d) esophagus and pharynx
96. Which of the following organelles contains digestive enzymes that bring about intracellular digestion?
    A) lysosome b) ribosome c) golgi body d) food vacuole
97. Which is not correct match?
    A) monosaccharides and amino acids-veins
    b) glycerol and fatty acids- Lacteals of lymphatic system
    c) monosaccharides and amino acids-arteries
    d) lymph vessels – lipoprotein molecules
98. The length of jejunum is roughly
    a) 2.4 meters b) 3.0 meters c) 25 cm d) 1.5 meters
99. What acts as a natural evaporative cooling system in Amphibians
    a) lungs b) mouth cavity c) skin d) all
100. A network of arteries and veins lying very close to each other and acting as countercurrent exchanger in some fishes is called
    a) ventriculus b) rate mirabile c) vesicles d) network of arteries
101. The maintenance of constant osmotic pressure in the fluids of an organism by the control of water and salt concentration is called
    a) water balance b) osmoregulation c) homeostasis d) osmoconformation

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102. Liver is the main storage center of
a) glycogen b) minerals c) fat soluble vitamins d) water soluble vitamins

103. Which of the following statement is not true
a) During winter, various endotherms go into hibernation
b) During hibernation the metabolic rate slows down
c) Mammals prepare for hibernation by building up for reserves
d) Hibernation commonly occurs during summer months

104. What is the cooling mechanism in birds?
A) panting b) sweat glands c) gular pouch d) feathers

105. When bird's body cools, the hormone that is released
a) insulin b) adrenaline c) thyroxin d) paratharmone

106. All of the following are motile stalkers except
a) crabs b) barnacles c) polychaetes d) gastropods

107. Heterotroph need proteins for their amino acids, which are used to build their own
a) body fats b) glycolipids c) DNA d) body proteins

108. Tube worms and barnacles are the example of
a) continuous feeders b) discontinuous feeders
c) suspension feeders d) deposit feeders

109. Following are the causes of gastric ulcer except
a) alcoholic beverages b) use of sugar energy
c) untreated stress d) helicobacter pylori bacteria

110. Which provides the greatest energy value per gram of nutrient
a) protein b) carbohydrates c) fat d) mineral water

111. When chyme passes from the stomach into duodenum, its acidity stimulates the release of three secretions
a) digestive enzymes b) pancreatic enzymes c) bile d) All

112. When the temperature rises above the temperature optima the rate metabolism declines because:
a) enzymes begin to denature b) pH is distributed
c) kinetic energy speeds up d) movement of molecules increase

113. Lower temperature may cause cells membranes to change from fluid to a solid state which cause interfere with many cellular
a) facilitated transport b) active transport
c) diffusion d) facilitated diffusion

114. Camels are well adapted for survival in the desert. Their adaptations include all but one:
a) large, flat feet b) urination on feet c) thick fur on top of body

115. Which is incorrect match?
A) herbivore-grasshopper b) sessile opportunists-polychaetes
c) lurking predators-praying mantis d) motile stalkers-squids

116. When temperature rises above the temperature optima the rate metabolism declines because:

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a) enzymes begin to denature b) pH is disturbed
c) kinetic energy speeds up d) movement of molecules increase

117. Most adults need about 1000 milligrams of _____ per day.
A) calcium b) potassium c) phosphorous d) magnesium

118. All the mammals except_____ have sweat glands that actively move watery solutions through pores to the skin surface
a) chimpanzee b) dog c) human d) horse

119. Salivary glands that secrete an anticoagulant are present in
a) lampreys b) bony fishes c) snakes d) lampreys and bony fishes

120. Which of the following statements is incorrect about amphibians?
A) They can bear the freezing temperature because of antifreeze substances
b) surrounding medium of most the amphibians is air as well as water
c) face marked daily and seasonal temperature changes

121. After boius formation it is pushed back of the mouth by the action of:
a) tounge b) muscles of the pharynx c) palate d) tongue and muscles of pharyns

122. Saliva in grasshopper contains the enzyme_____ which begins the enzymetic digestion of carbs
a) sucrose b) protease c) amylase d) maltase

123. First part of large intestine is
a) rectum b) ascending colon c) caecum d) sigmoid colon

124. All are osmoconformers except
a) salmon b) hagfish c) skates d) sharks

125. The example of nonparasitic multicellular animal that lack mouth and digestive system and absorb nutrients across their body surface is
a) gutless bivalve b) progonophoran worm c) both a and b d) chilomonas

126. Tick the mismatch
a) endotherms-mammals b) homeotherms
c) ectotherms-fish d) warm blooded - retiles

127. Which of the following animals are omnivores?
A) bat b) hawk c) humming bird d) bears

128. All are the functions of sodium except
a) important in fluid balance b) active transport
c) detoxification reactions d) essential for conduction of action potentials

129. Brown color fat in hibernating mammals have _____ with their iron-containing cytochromes
a) ribosomes b) mitochondria c) golgi bodies

130. Villi and microvilli increases the process of
a) absorption b) digestion c) ingestion d) assimilation

131. What of the following chemicals is released by the pancreas during and just after a meal
a) insulin b) pepsin c) glucagon d) glycogen

132. Following is the common food items which cause decay or caries excpt:
a) fibrous food b) sweets and cholocate c) cakes and biscuits d) fruit canned in syrup

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133. Following are antifreeze materials found in fishes except:
a) certain glycopeptides b) albumin protein c) sorbitol d) glycerol

134. All of the following are unsaturated fatty acids except
a) linolenic acid b) palmitic acid c) arachidonic acid d) linoleic acid

135. One cup of skimmed milk contains
a) 225 calories b) 100 calories c) 86 calories d) 86 Calories

136. Micronutrients are usually
a) inorganic minerals b) vitamins c) a and b d) calcium

137. Which of the following are used as micronutrients
a) minerals b) disaccharides c) oils d) proteins

138. Organisms which can synthesize all their own complex molecules from simpler inorganic substances are said to be
a) parasites b) autotrophs c) heterotrophs d) decomposers

139. Micronutreint, a component of at least 70 enzymes and needed for wound healing and fertilization
a) selenium b) zinc c) manganese d) molybdinum

140. Chemical and/or mechanical breakdown of complex food into diffusible molecules is
a) digestion b) assimilation c) ingestion d) absorption

141. All are structural proteins except
a) callogen b) actomyosin c) hemoglobin d) keratin

142. Following vitamins form the part of coenzymes needed for the oxidation of food components, except
a) cobalamin b) niacin c) both d) panthonic acid

143. The main source of vitamin E are, except
a) fish, meat b) margarine c) cereal seeds d) fruits, nuts, vegetables

144. Following are the functions of vitamin E except
a) prevents oxidation of poly unsaturated fatty acids
b) need for blood clotting c) antioxidant
d) may help maintain stability of all cell membrane

145. Animal soursces of protein include beans, peas, nuts and
a) milk b) other animals c) eggs d) all

146. Heterotrophs need proteins for their amino acids which are used to build their own
a) body fats b) glycolysis c) body proteins d) DNA

147. Endoparasites absorb their nutrients across their body surface. They lack
a) eyes b) mouth c) digestive system d) all

148. Following are example of deposit feeders except
a) lophophores b) earthworms c) many polychaete d) some sea urchins

149. Starchy foods break down to their constituent sugars and ultimately into
a) fructose b) glucose c) galactose d) mannose

150. Among the energy values of nutrients, 9.3 calories is that of
a) carbohydrate b) fat c) vitamin d) proteins

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151. All of the following are external parasites
a) leeches b) ticks c) lampreys d) mites and hook worm

152. Which of the following proteins accelerate the chemical reaction
a) pepsin b) insulin c) antibodies d) casein

153. Which of the following are not suspension feeders
a) baleen whale b) brachiopods c) jelly fishes d) bivalve mollusks

154. Which of the following micronutrients is the component of bone and teeth and prevents tooth decay as well
a) fluorine b) manganese c) selenium d) cobalt

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