

Bio 202a Final Study Guide

Name: _____

Date: _____

1. What is a passageway for air, food and water?
2. What is a series of convulsive inhalations followed by a single prolonged exhalation where the rima glottidis closes earlier than normal after each inhalation so only a little air enters the lung with each inhalation?
3. What is a spasmodic contraction of the muscles of exhalation that forcefully expels air through the nose and mouth?
4. What is an inhalation followed by many short convulsive exhalations during which the rima glottidis remains open and the vocal folds vibrate, accompanied by characteristic facial expressions?
5. What are the parts of the upper respiratory system?
6. When blood pH drops, the amount of oxyhemoglobin _____ and oxygen delivery to the tissue cells _____.
7. What is a spasmodic contraction of the diaphragm followed by spasmodic closure of the rima glottidis, which produces a sharp sound on inhalation?
8. What tissues provides the functions of the inner layer of the conducting organs?
9. What is a long drawn and deep inhalation immediately followed by a shorter but forceful exhalation?
10. What is the primary gas exchange site?
11. What is the principle bile pigment?
12. Which layer of the GI tract is composed of areolar connective tissue that binds the mucosa to the muscularis?
13. Why do emotions such as anger or fear slow digestion?
14. Which portion of the peritoneum drapes over the transverse colon and coils of the small intestine?
15. Brunner's glands are/ do ?
16. What portion of the peritoneum attaches the liver to the anterior abdominal wall and diaphragm?
17. What layer of the GI tract is composed of areolar connective tissue containing blood and lymph vessels?
18. Which of the accessory organs produces a fluid that functions to emulsify dietary fats?
19. The enzyme which digests DNA is called?
20. What is the primary function of the mouth?
21. What is the primary function of the villi of the small intestine?

22. What major duct carries a fluid rich in bicarbonate ions?
23. The capability of the GI tract to move material along its length is called
 1. Motility
 2. Propulsion
 3. Digestion
 4. Defecation
24. Which pancreatic enzymes digests lipids?
25. Which plexus is located between the longitudinal and circular smooth muscle layers of the muscularis?
26. Which hormone is the primary hormone involved in protein breakdown in the postabsorptive state?
27. Glycogenolysis is _____ and stimulated by _____.
28. _____ is a severe and often fatal disorder caused by exposure to high temperatures?
29. How many reactions take place during the Krebs cycle?
30. The most dramatic metabolic change that occurs with fasting is _____
31. What happens in the absorptive state?
32. Thyroid hormones _____
33. Provitamins are _____
34. Which reaction describes the oxidization of acetyl CoA to produce carbon dioxide, ATP, NADH + H⁺ and FADH₂?
35. Where does the Krebs cycle take place?
36. What factors affect the metabolic rate and the rate of heat production?
37. What hormone stimulates glycogenesis?
38. What transports dietary lipids?
39. What process involves the synthesis of triglycerides?
40. What is a mechanism of heat transfer that involves direct contact?
41. In the absorptive state, most glucose that enters the liver is converted to _____
42. Which hormone(s) dominate(s) the absorptive state?
43. Antioxidant vitamins are?
44. How many ATPs can come from substrate level phosphorylation during glycolysis?
45. What factors affect heat production?
46. This occurs when a substance passes from the fluid in the tubular lumen through the apical membrane, across the cytosol, and then into the interstitial fluid.
47. _____ division of ANS regulates kidney functions.
48. This layer of filtration membrane is composed of collagen fibers and proteoglycans in a glycoprotein matrix.
49. What is the correct order of blood flow through the kidneys?

50. Excessive urine concentration of a normal breakdown product of hemoglobin, caused by pernicious anemia, infectious hepatitis, jaundice or cirrhosis, indicates which condition?
51. This occurs when stretching triggers contraction of smooth muscle walls in afferent arterioles.
52. Increased secretion of aldosterone would result in a(n) _____ of blood _____?
53. The major functions of the kidney?
54. Anorexia, starvation, or a diet too low in carbohydrates indicates which condition?
55. The ovarian phase between the end of menstruation and beginning of ovulation is the _____
56. What is produced by the ovaries?
57. Paraurethral (Skene's) glands secrete _____
58. What is the site of fertilization?
59. What is the male pattern of development "master switch" gene?
60. What site of sperm production?
61. Which cells secrete testosterone?
62. Which structure is formed by the union of the duct from the seminal vesicle and the ampulla of the vas deferens?
63. Which ligament arises from the pubic symphysis in males?