HESI A2 and ALLIED HEALTH

PRACTICE TEST II Bio/AP/Genetics/Life Sci

1. Bending arm at elbow to touch shoulder with hand is

- A. Supination
- B. Rotation
- C. Flexion
- D. Extension
- 2. The knee is _____ to the hip.
 - A. Proximal
 - B. Anterior
 - C. Sagittal
 - D. Distal
 - 3. An example of a sugar is
 - A. Riboflavin
 - B. Lipid
 - C. Amino acid
 - D. Sucrose
 - 4. The building blocks of proteins are
 - A. amino acids
 - B. steroids
 - C. fatty acids
 - D. soaps
- 5. All refer to DNA except
 - A. stores genetic information
 - B. deoxyribose as its sugar
 - C. single stranded
 - D. helix form

- 6. The overall reaction of cellular respiration is
 - A. glucose + oxygen \rightarrow carbon dioxide + water + energy
 - B. maltose + oxygen \rightarrow carbon dioxide + water + energy
 - C. sucrose + oxygen \rightarrow carbon dioxide + water + energy
 - D. lactose + oxygen \rightarrow carbon dioxide + water + energy
- 7. The organelle in which the Krebs Cycle occurs
 - A. ribosomes
 - B. lysosome
 - C. nucleus
 - D. mitochondria
- 8. To view bacteria for its form or shape, one would use the
 - A. high power objective
 - B. low power
 - C. oil immersion
 - D. scanning objective
- 9. The function of this organelle is protein synthesis
 - A. ribosomes
 - B. lysosomes
 - C. plastids
 - D. cilia
 - 10. The Golgi body functions as a (n)
 - A. warehouse and repacking plant
 - B. factory
 - C. transporter
 - D. grocery store
 - 11. In mitosis, the chromosomes are aligned in the center of the cell during
 - A. anaphase
 - B. telophase
 - C. metaphase
 - D. prophase

- 12. Meiosis occurs in which organs?
 - A. Reproductive
 - B. Digestive
 - C. Respiratory
 - D. Urinary

13. A disease caused by a deficiency of thiamine is

- A. anemia
- B. scurvy
- C. beriberi
- D. thalassemia
- 14. Disease caused by vitamin D deficiency
 - A. night blindness
 - B. rickets
 - C. scurvy
 - D. cramps

15. The following are all parts of the digestive system except

- A. esophagus
- B. pancreas
- C. stomach
- D. bladder

16. The blood first enters the heart from the

- A. vena cavae
- B. pulmonary artery
- C. aorta
- D. left auricle/atrium
- 17. The nerve leading from the eye to the brain
 - A. tympanic
 - B. optic
 - C. auditory
 - D. spinal

18. Insulin is produced in the

- A. kidney
- B. pancreas
- C. liver
- D. gall bladder

19. The knee cap is called the

- A. femur
- B. tarsal
- C. frontal
- D. patella

20. The adrenal glands are closest to the

- A. liver
- B. kidney
- C. stomach
- D. ovary

21. Scarlet fever is caused by

- A. streptococcus
- B. meningococcus
- C. pneumococcus
- D. salmonella

22. The carrier of malaria is a

- A. fly
- B. wasp
- C. mosquito
- D. flea

23. Today we live in the _____ Era

- A. Paleozoic
- B. Mesozoic
- C. Cenozoic
- D. Archeozoic

24. If a child is 1 month old, the child would be a

- A. neonate
- B. infant
- C. child
- D. adolescent

25. In pea plants yellow Y is dominant over green y. A hybrid yellow plant would be written as

- A. Yy
- B. YY
- C. yy
- D. YX

26. If parents have the blood type AA and 00, the children would be

- A. AB
- B. AA
- C. 00
- D. A0

27. The ______ is the functional unit of the kidney.

- A. nephron
- B. neuron
- C. proton
- D. neutron

- 28. Protein is obtained from this food group
 - A. meat
 - B. bread
 - C. dairy
 - D. fruit

29. When blue litmus turns red this is an indicator for

- A. acid
- B. base
- C. salt
- D. soap
- 30. During the Krebs Cycle
 - A. Energy stored in pyruvate is transferred to NADH and FADH₂
 - B. 16 ATP are produced
 - C. lactic acid and pyruvic acid are consumed
 - D. ketones and acetones are produced
- 31. The sex of the child is determined by the
 - A. male
 - B. female
 - C. either male or female
 - D. neither male or female
- 32. The basic unit of the lung
 - A. capillary
 - B. alveoli
 - C. bronchi
 - D. trachea
- 33. The heart is composed of _____ muscle.
 - A. smooth
 - B. skeletal
 - C. cardiac
 - D. striated

34. Sperm have haploid number of chromosomes due to

- A. mitosis
- B. meiosis
- C. fertilization
- D. cleavage

35. _____ stores starch in green plants

- A. pith
- B. phloem
- C. xylem
- D. cambium

36. _____ is the top portion of the pistil.

- A. style
- B. stigma
- C. ovary
- D. sepal

37. Which is the most plentiful in air?

- A. nitrogen
- B. oxygen
- C. carbon dioxide
- D. hydrogen

38. Passive immunity to diphtheria may be achieved by taking an injection of a(n)

- A. vaccine
- B. toxin
- C. toxoid
- D. antitoxin
- 39. The cloud that occurs at greatest height
 - A. cirrus
 - B. cumulus
 - C. nimbus
 - D. stratus

40. The universal blood donor is

- A. AB
- B. A
- С. В
- D. O

41. The universal recipient is

- A. AB
- B. A
- С. В
- D. O

42. The vitamin that helps in blood coagulation

- A. CB. D
- C. E
- D. K

43. Bacilli are bacteria shaped like

- A. rods
- B. beads
- C. spirals
- D. cocci

44. In plants _____ help regulate water

- A. plastids
- B. microtubules
- C. vacuoles
- D. centrioles

45. Cell, tissue , _____, organ, system

- A. organ
- B. organelle
- C. population
- D. community

46. The Mesozoic Era is the age of the

- A. fish
- B. reptiles
- C. amphibians
- D. humans

47. The Father of genetics is

- A. Pasteur
- B. Newton
- C. Mendel
- D. Curie

48. Water vapor in the air is called

- A. dew
- B. rain
- C. breeze
- D. humidity

49. The boundary where two air masses meet is a

- A. drift
- B. current
- C. front
- D. stream

50. Which of the following bodily substances is a catalyst?

- A. bile
- B. water
- C. enzyme
- D. hemoglobin

51. The largest part of the central nervous system is

- A. cerebellum
- B. medulla
- C. cerebrum
- D. spinal cord

52. I will score well on this exam

- A. Yes!
- B. Most certainly!
- C. Sure!
- D. You bet!

Answer Key

1. C	18. B	35. A
2. D	19. D	36. B
3. D	20. B	37. A
4. A	21. A	38. D
5. C	22. C	39. A
6. A	23. C	40. D
7. D	24. B	41. A
8. C	25. A	42. D
9. A	26. D	43. A
10. A	27. A	44. C
11. C	28. A	45. B
12. A	29. A	46. B
13. C		47. C
14. B	30. A	48. D
15. D	31. A	49. C
16. A	32. B	50. C
17. B	33. C	51. C
	34. B	52. ABCD