https://selldocx.com/products/test-bank-perception-5e-blake

Student: _____

1. The human visual system can work effectively at light levels that differ by a factor of about
   A. 100,000.
   B. 1 million.
   C. 10 million.
   D. 100 million.

2. The component of the visual system that modifies and transmits messages from the eye to the brain is the
   A. visual centers of the brain.
   B. eyes.
   C. visual pathways.
   D. outer segments.

3. An organism that can detect electromagnetic energy is at an advantage because
   A. electromagnetic radiation travels very rapidly.
   B. electromagnetic radiation carries information about wavelength.
   C. electromagnetic energy interacts with the surface molecules of objects.
   D. all of these

4. An eye with many individual light sensors, each with its own, independent optical system that focuses light onto a small number of receptors, is found in
   A. mammals.
   B. birds.
   C. fish.
   D. insects.

5. If Lisa is being exposed to energy with high rates of oscillation, she is experiencing
   A. long wavelengths.
   B. short wavelengths.
   C. weak intensity.
   D. strong intensity.

6. Having eyes in the front of the head
   A. has the advantage of increasing the overall field of view.
   B. leads to improved depth perception.
   C. confers no advantage over having eyes on the side of the head.
   D. makes it unnecessary to move the head or eyes to see.

7. Movements of the eyes are
   A. controlled by the extraocular muscles.
   B. largely unnecessary with eyes located in the front of the head.
   C. relatively slow and inaccurate.
   D. always intentional.

8. This rectus muscle contracts to rotate the eye toward the nose.
   A. inferior rectus
   B. superior rectus
   C. lateral rectus
   D. medial rectus

9. Which of the following is NOT likely to increase the rate at which you blink?
   A. starting a casual conversation
   B. entering a humid room
   C. becoming angry
   D. all of these

10. If we wanted to test the ability to see a dimming light at various times during a blink, we could shine a light
   A. into the nose.
   B. on the roof of the mouth.
   C. in the right ear.
   D. in the left ear.

11. If you somehow became small enough to follow the normal path of light into the eye, which of the following parts of the eye is the one you'd pass through or encounter last?
   A. cornea
   B. vitreous
   C. iris
   D. choroid

12. The clear, transparent portion of the eye's outermost tunic is the
   A. retina.
   B. choroid.
   C. cornea.
   D. ciliary body.

13. The part of the eye that contributes most to the bending (refraction) of light is the
   A. lens.
   B. aqueous humor.
   C. cornea.
   D. iris.

14. Which of the following is NOT one of the functions of the aqueous humor?
   A. It transports oxygen and nutrients.
   B. It carries away waste products.
   C. it maintains the shape of the eyeball.
   D. All of these are functions of the aqueous humor.

15. The lens relies on the _____ for its source of nourishment.
   A. capillaries
   B. cardiovascular system
   C. vitreous humor
   D. aqueous humor

16. The structure in the eye that serves a light-absorbing function similar to that which flat black paint serves in a camera is the
   A. choroid.
   B. aqueous humor.
   C. cornea.
   D. ciliary body.

17. The purpose of the choroid is to
   A. reduce light scatter.
   B. produce the aqueous humor.
   C. give the eye its color.
   D. provide depth of field.

18. The single most common cause of blinding eye disease in North America is
    A. glaucoma.
    B. macular degeneration.
    C. sclerosis.
    D. cataract.

19. The structure of the eye that regulates the amount of light reaching the back of the eye is the
    A. cornea.
    B. lens.
    C. iris.
    D. retina.

20. If we say that Harold has brown eyes, we really mean that Harold has brown
    A. pupils.
    B. irises.
    C. scleras.
    D. cortices.

21. Which of the following statements is NOT true of the crystalline lens of the eye?
    A. It gets smaller with age.
    B. It is responsible for accommodation.
    C. Its clarity at birth can determine development of the visual nervous system.
    D. It has the highest percentage of protein of all the parts of the body.

22. As we age, the lenses in our eyes become more yellow. This has the following outcome(s):
    A. The world looks more yellow.
    B. The world looks blue after the lens is removed surgically.
    C. neither the world looks more yellow nor the world looks blue after the lens is removed surgically
    D. both the world looks more yellow and the world looks blue after the lens is removed surgically

23. A "floater" in the eye would be found in the
    A. cornea.
    B. lens.
    C. vitreous humor.
    D. aqueous chamber.

24. As light passes from the pupil through the retina it meets, in order from first to last,
    A. ganglion cells > collector cells > receptors.
    B. collector cells > receptors > ganglion cells.
    C. collector cells > ganglion cells > receptors.
    D. receptors > collector cells > ganglion cells.

25. In terms of the firing of cells within the eye, the correct order is
    A. ganglion cells > collector cells > receptors.
    B. collector cells > receptors > ganglion cells.
    C. collector cells > ganglion cells > receptors.
    D. receptors > collector cells > ganglion cells.

26. What is the result of damage to retinal cells?
    A. Retinal cells are repaired within minutes.
    B. Retinal cells are repaired within hours.
    C. Retinal cells are repaired within days.
    D. Retinal cells cannot be repaired.

27. You're looking directly at some particular visual target. You're looking at it with your
    A. macula.
    B. optic disk.
    C. fovea.
    D. nasal retina.

28. If an eye doctor, looking into someone's eye with an ophthalmoscope, sees the macula to the left of the optic disk, he or she is looking into
    A. the person's right eye.
    B. the person's left eye.
    C. the reflection of his or her own right eye.
    D. a diseased eye.

29. That part of the fovea that contains neither rods nor cones and is the location where the nerve fibers exit the retina is the
    A. fovea.
    B. optic disk.
    C. iris.
    D. macula.

30. Which eye structure provides a waste disposal function for the retina?
    A. pigment epithelium
    B. optic disk
    C. aqueous humor
    D. optic nerve

31. The pattern of light that forms the raw material on which the retina works is called
    A. phototransduction.
    B. retinal image.
    C. photopigment.
    D. distal stimulus.

32. Which one of the following factors does NOT determine the sharpness of images formed on the retina?

    A. optical power of the cornea
    B. optical power of the lens
    C. size of the eyeball
    D. all are important

33. Which of the following help(s) to determine the sharpness of an image on the retina?
    A. optical power of the cornea
    B. optical power of the lens
    C. length of the eyeball
    D. all of these

34. An eye that naturally focuses light exactly on the retina is termed
    A. myopic.
    B. hypermetropic.
    C. hyperopic
    D. emmetropic.

35. The eye problem(s) for which you would prescribe a convex lens is (are)
    A. hyperopia.
    B. presbyopia.
    C. neither hyperopia nor presbyopia
    D. both hyperopia and presbyopia

36. To remedy myopia, one must use
    A. a convex lens.
    B. a concave lens.
    C. both a convex lens and a concave lens (bifocal lens)
    D. none of these

37. Evidence for a genetic influence on myopia includes
    A. different prevalence in different populations.
    B. increased incidence in sailors of submarines.
    C. rising prevalence among urbanized children.
    D. development of myopia in monkeys given a close visual environment.

38. This type of farsightedness occurs with aging.
    A. myopia
    B. hyperopia
    C. presbyopia
    D. glaucoma

39. We can't see very well under water without a diving mask because
    A. the cornea is "designed" to be surrounded by air.
    B. the presence of water functionally eliminates most of the cornea's refractive power.
    C. pressure on the lens is increased.
    D. both the cornea is "designed" to be surrounded by air and the presence of water functionally eliminates most of the cornea's refractive power

40. A risk/Risks of laser surgery (LASIK) on the cornea is/are
    A. perception of glare and halos.
    B. incomplete correction of the refraction error.
    C. neither perception of glare and halos nor incomplete correction of the refraction error
    D. both perception of glare and halos and incomplete correction of the refraction error

41. The fovea of the eye is NOT
    A. thicker than the other regions of the retina are because of its numerous photoreceptors.
    B. the center of the retina.
    C. the area of sharpest vision.
    D. abundantly supplied with ganglion cells.

42. An animal that is most active during the hours of darkness is most likely to have a retina containing a
    A. preponderance of cones.
    B. preponderance of rods.
    C. good balance of rods and cones.
    D. preponderance of collector cells.

43. The ratio of rods to cones in a human is approximately
    A. 2:1.
    B. 4:1.
    C. 9:1.
    D. 15:1.

44. In the human eye, you would find the greatest concentration of cones
    A. in the center of the fovea.
    B. near the periphery of the retina.
    C. 10-15 degrees toward the nose from the fovea.
    D. 10-15 degrees toward the temple from the fovea.

45. The area of the retina that is associated with the most acute vision is the
    A. fovea.
    B. optic disk.
    C. iris.
    D. macula.

46. The density and the regularity of receptors in the eye
    A. are less in infants.
    B. decrease with old age.
    C. can be related to visual acuity.
    D. all of these

47. Which of the following is a photopigment?
    A. opsin
    B. retinin
    C. vitreous
    D. aqueous

48. Photoreceptors communicate with other nerve cells in the retina by using
    A. infrared magnetic field effects.
    B. quantum oscillations.
    C. transmitter substances.
    D. optic disk migration.

49. Successive stimulation of the eye with three wavelengths of light of 440, 530, and 560 nanometers should yield the respective color perceptions of
    A. red, green, blue.
    B. violet, green, yellow.
    C. blue, red, yellow.
    D. blue, green, red.

50. Rods are most sensitive to light at which of the following wavelengths?
    A. 440
    B. 500
    C. 530
    D. 560

51. How many distinct classes of cones are there?
    A. 3
    B. 5
    C. 8
    D. 11

52. Cones of the retina are most sensitive to light having a wavelength of
    A. 440 nanometers (violet).
    B. 530 nanometers (yellowish-green).
    C. 560 nanometers (yellow).
    D. any of the choices, depending on the class of cone in question

53. Which species has a retina that CANNOT respond in the ultraviolet (UV) range of wavelengths?
    A. gerbil
    B. bat
    C. human
    D. All these species have retinas that can respond to UV light.

54. If the distance from the eye to an object is doubled, the visual angle
    A. doubles.
    B. halves.
    C. changes proportionally to 57.3.
    D. changes by a factor of pi.

55. Suppose you were designing the visual system for a new animal. In deciding where to place the eyes, what would you want to know about the animal and its habits in order to make an intelligent decision?

56. In what ways is the human eye comparable to a camera?

57. Why don't we normally see the shadows from the blood vessels in our eyes?

58. In terms of their contributions to clear vision, which would you rather do without—your cornea or your lens? Why?

59. A hyperope and a myope are both looking at a distant object. Neither one is wearing spectacles or contact lenses. Explain how the hyperope manages to see that distant object clearly (without getting any closer to it). Explain why the myope cannot use the same method as the hyperope.

60. What is the blind spot, and why don't we normally see it?

61. Describe how pigment molecules allow light energy to be changed into a form that can travel in the nervous system.

ch02 Key

1. D
2. C
3. D
4. D
5. B
6. B
7. A
8. D
9. B
10. B
11. D
12. C
13. C
14. D
15. D
16. A
17. A
18. A
19. C
20. B
21. A
22. B
23. C
24. A
25. D
26. D
27. C
28. A
29. B
30. A
31. B
32. D
33. D
34. D
35. D
36. B

37. A

38. C

39. D

40. D

41. A

42. B

43. C

44. A

45. A

46. D

47. A

48. C

49. B

50. B

51. A

52. D

53. D

54. B

55. Student answers may vary.

56. Student answers may vary.

57. Student answers may vary.

58. Student answers may vary.

59. Student answers may vary.

60. Student answers may vary.

61. Student answers may vary.

ch02 Summary

Category	*# of Questions*
Blake - Chapter 02	61
Level: Basic	41
Level: Difficult	1
Level: Moderate	19
Objective: Learning Objective 1	5
Objective: Learning Objective 10	1
Objective: Learning Objective 11	6
Objective: Learning Objective 12	1
Objective: Learning Objective 2	4
Objective: Learning Objective 3	2
Objective: Learning Objective 4	11
Objective: Learning Objective 5	6
Objective: Learning Objective 6	1
Objective: Learning Objective 7	4
Objective: Learning Objective 8	7
Objective: Learning Objective 9	5
Objective: Learning Objectives 11	1
Objective: Learning Objectives 2, 4	1
Objective: Learning Objectives 4	2
Objective: Learning Objectives 4, 5, 7, 8, 9, 10	1
Objective: Learning Objectives 7, 8	1
Objective: Learning Objectives 9	1
Objective: Learning Objectives 9, 11	1
Question type: Applied	1
Question type: Conceptual	2
Question type: Factual	58