Hauser-Cram Test Bank: Chapter 2

Biological Foundations of Child Development

1. PKU
    A. Is a genetic disorder.
    B. Is always a cause of mental retardation.
    C. is only found in Asian children.
    D. has been obliterated.

Ans: A
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

2. Phenalanine
    A. is an amino acid.
    B. is found in many foods.
    C. must be broken down by enzymes or disability will occur.
    D. all of these

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

3. The first state to require all newborns to be tested for PKU was
    A. Tennessee.
    B. Massachusetts.
    C. California.
    D. New York.

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

4. In what year was PKU testing first legislated?
    A. 1973
    B. 1965

C. 1963
D. 1964

Ans: C
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

5. How many states NOW require PKU testing?
    A. 25
    B. 35
    C. 45
    D. 50

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

6. What cures PKU?
    A. diet
    B. enzyme replacement
    C. exercise
    D. nothing

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

7. “Normal” is
    A. average
    B. complex
    C. a setting on a washing machine
    D. what most people aspire to

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy

Bloom: Knowledge

8. How many elements make up 99% of our bodies?
    A. 6
    B. 7
    C. 8
    D. 22

Ans: A
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

9. What elements make up most of the body?
    A. oxygen, nitrogen, helium, calcium, boric acid
    B. oxygen, carbon, melphindium, nitrogen, calcium, phosphorus
    C. oxygen, calcium, gold, phosphorus, nitrogen, gold
    D. oxygen, carbon, hydrogen, nitrogen, calcium, phosphorus

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

10. How many cells make up the human body?
    A. 50–100 trillion
    B. 50–100 billion
    C. 100–200 billion
    D. 100–200 trillion

Ans: A
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

11. The human body is about _____ water.
    A. 30%
    B. 40%

C. 50%
D. 60%

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

12. The two types of cells are
    A. sex and gamete.
    B. somatic and gamete.
    C. somatic and dermis.
    D. gamete and neuronal.

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

13. Gametes are
    A. body cells.
    B. sex cells.
    C. skin cells.
    D. brain cells.

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

14. Somatic cells are
    A. body
    B. sex
    C. skin
    D. brain

Ans: A
Section Ref: The Biology of Life
Learning Objective: LO 1

Difficulty: Easy
Bloom: Knowledge

15. The _____ controls reproducing the cell.
    A. ova
    B. soma
    C. gamete(s)
    D. cell nucleus

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

16. Cells reproduce more rapidly in
    A. old age.
    B. middle age.
    C. children.
    D. the brain.

Ans: C
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

17. Who will heal the quickest from an injury?
    A. Bill, who is 3.
    B. Bob, who is 23.
    C. David, who is 43.
    D. Jerry, who is 63.

Ans: A
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

18. DNA is
    A. diethylnucleic acid.
    B. deneural acid.
    C. diribionucleic acid.

D. deoxyribonucleic acid.

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

19. RNA
    A. is another name for DNA.
    B. is not as important as DNA.
    C. translates DNA instructions.
    D. is a double helix.

Ans: C
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

20. The three main types of RNA are
    A. messenger, transfer, chromosomal.
    B. messenger, transfer, ribosomal.
    C. messenger, interstitial, chromosomal.
    D. transfer, ribosomal, transcriber.

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Medium
Bloom: Knowledge

21. Transcription is
    A. RNA misreading DNA.
    B. making mRNA.
    C. writing genetic code.
    D. dynthesizing proteins with t RNA.

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Medium
Bloom: Knowledge

22. Translation is
    A. RNA misreading DNA.
    B. making mRNA.
    C. writing genetic code.
    D. synthesizing proteins with tRNA.

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Medium
Bloom: Knowledge

23. Cells need _____ to work.
    A. calcium
    B. vitamins
    C. carbon
    D. proteins

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Medium
Bloom: Knowledge

24. The best way to get cell protein is to eat a lot of meat.
    A. True
    B. False

Ans: False
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

25. Who has the most genes according to the Human Genome Project?
    A. dogs
    B. people
    C. roundworms
    D. All are equal.

Ans: A
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy

Bloom: Knowledge

26. Who has the most complicated set of protein-coding genes?
    A. dogs
    B. people
    C. worms
    D. bees

Ans: B
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Easy
Bloom: Knowledge

27. Turning genes off is
    A. causing paralysis in worms.
    B. overcoming sperm deformities.
    C. improving RNA.
    D. curing disease.

Ans: D
Section Ref: The Biology of Life
Learning Objective: LO 1
Difficulty: Medium
Bloom: Knowledge

28. The nucleus of a cell contains
    A. chromosomes.
    B. karyotypes.
    C. genotypes.
    D. phenotypes.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

29. _____halves the number of chromosomes in body cells.
    A. Mitosis
    B. Meiosis
    C. Osmosis
    D. Autosomes

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

30. Eye color is an example of
    A. a genotype.
    B. a phenotype.
    C. a karyotype.
    D. gametes.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

31. Directly observable characteristics are affected by experience and by
    A. phenotype.
    B. genotype.
    C. karyotype.
    D. gametes.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

32. Chromosomes
    A. are inherited from the mother.
    B. are inherited from the father.
    C. always come in matched pairs.
    D. store and transmit genetic information.

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

33. DNA duplicates during
    A. mitosis.

B. meiosis.
C. osmosis.
D. gamete formation.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

34. Twenty-two matching pairs of chromosomes are
A. sex chromosomes.
B. XY.
C. XX.
D. autosomes.

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

35. A student's 23rd pair of chromosomes is XY. This person
A. is male.
B. is female.
C. has PKU.
D. has Down syndrome.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

36. Which is true about sex chromosomes?
A. The X chromosomes carry most of the genetic material.
B. Both boys and girls have several pairs of X and Y chromosomes.
C. X and Y separate into different cells in females.
D. The baby's sex is determined by the presence of an X or Y in the fertilizing sperm.

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2

Difficulty: Easy
Bloom: Knowledge

37. Which of the following is female?
    A. XX
    B. XY
    C. XXY
    D. XYY

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

38. A halpogroup is
    A. a unique population
    B. a hologram of a genome
    C. an ancestral genetic clan
    D. African heritage

Ans: C
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

39. A heterozygous person who has one recessive allele
    A. will pass the dominant trait to their children.
    B. will pass the recessive trait to their children.
    C. may be a carrier of the trait.
    D. cannot pass on the trait.

Ans: C
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

40. If the alleles from both parents are alike, their child will be
    A. monozygotic.
    B. female.
    C. homozygous.

D. heterozygous.

Ans: C
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

41. How your genes are expressed is called your
    A. phenotype.
    B. genotype.
    C. alleles.
    D. autosomes.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

42. Which of the following is due to dominant alleles?
    A. hemophilia
    B. Huntington's disease
    C. thyroid disease
    D. anemia

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

43. The average life expectancy of someone in the United States is about
    A. 18.
    B. 35.
    C. 42.
    D. 78 This statistic is not mentioned in the text. Current CDC estimate is 78 years on average in the U.S.

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

44. Fragile X syndrome
    A. is a major inherited cause of mental retardation.
    B. is a type of polygenic inheritance.
    C. occurs with a RNA mutation.
    D. occurs more frequently with females.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

45. The Smiths' doctor told them that their child will be born with the most common chromosomal disorder, which is
    A. Turner's
    B. Down
    C. Fragile X
    D. Klinefelter's

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

46. Who has the highest probability of having a child with Down syndrome?
    A. 15-year-old Jill
    B. 24-year-old Judy
    C. 35-year-old Sarah
    D. 43-year-old Betty

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

47. Down syndrome often results from
    A. an extra chromosome.
    B. an error during mitosis.
    C. a broken piece of the 21st chromosome.
    D. failure of the 21st pair of chromosomes separating during meiosis.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

48. Anna has Turner's syndrome. She has a(n)_____chromosome.
    A. extra X
    B. missing X
    C. missing Y
    D. extra Y

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

49. The recessive allele is
    A. expressed.
    B. hidden.
    C. contagious.
    D. an enzyme.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

50. Who might have had Marfan syndrome?
    A. Napoleon
    B. a horse jockey
    C. Abraham Lincoln
    D. a dwarf

Ans: C
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

51. People most likely to have sickle cell anemia are
    A. Caucasian.
    B. of African descent.
    C. European.
    D. Asian.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

52. Co-dominance occurs in
    A. blood type.
    B. dominant genes.
    C. recessive genes.
    D. Down syndrome.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

53. Which sex chromosome carries more genes?
    A. male
    B. female
    C. Both are the same.
    D. No one knows for sure.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

54. Which gender has more sex-linked inherited disorders?
    A. male
    B. female
    C. Both are the same.
    D. No one knows.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

55. Why do males have more sex-linked inherited disorders?
    A. because they have a matched pair of sex chromosomes
    B. because they have an unmatched pair of sex chromosomes
    C. because men are more fragile
    D. because females are hardier

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

56. Which of the following is true about sex differences?
    A. Miscarriage of girls is more common, and birth defects are more common in boys.
    B. Rates of miscarriage and birth defects are higher for boy fetuses.
    C. Rates of miscarriage and birth defects are higher for girl fetuses.
    D. A total of 106 girls are born worldwide for every 100 boys.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

57. Examples of X-linked recessive conditions include all of the following except
    A. Duchene muscular dystrophy.
    B. Down syndrome.
    C. hemophilia.
    D. red-green color blindness.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

58. When a harmful allele is carried on the X chromosome,
    A. males are most likely to be affected.
    B. females are most likely to be affected.
    C. 50% of females will be affected.
    D. 50% of males will be affected.

Ans: A
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

59. Chromosomal abnormalities are caused by too many chromosomes.
    A. True
    B. False

Ans: False
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

60. Trisomy 21 is better known as
    A. hemophilia.
    B. Duchene muscular dystrophy.
    C. Klinefelter's syndrome.
    D. Down syndrome.

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

61. The incidence of Down syndrome increases with
    A. the number of alcoholic drinks the mother has while pregnant.
    B. exposure to smoking.
    C. maternal age.
    D. number of deformed sperm.

Ans: C
Section Ref: Genes and Heredity

Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

62. People with Down syndrome are also at risk for other serious physical disorders.
    A. True
    B. False

Ans: True
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

63. Turner's syndrome occurs most often in
    A. males.
    B. females.
    C. both sexes equally.
    D. neither males or females; it has been eradicated.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

64. Most chromosomal defects result from
    A. mistakes in mitosis.
    B. mistakes in meiosis.
    C. somatic mutations.
    D. germ-line mutations.

Ans: B
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

65. Chromosomally, an individual with Turner's syndrome has the following sex chromosomes:
    A. XX
    B. XY
    C. XXY

D. XO

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

66. The most common cause of intellectual disability in males is
    A. cystic fibrosis.
    B. hemophilia.
    C. Down syndrome.
    D. Fragile X syndrome.

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

67. Who should seek genetic counseling?
    A. women over 35
    B. those who already have a child with a genetic disorder
    C. women who have had two or more miscarriages
    D. all of the above

Ans: D
Section Ref: Genes and Heredity
Learning Objective: LO 2
Difficulty: Easy
Bloom: Knowledge

68. Which is more important, nature or nurture?
    A. nature
    B. nurture
    C. both
    D. neither

Ans: C
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

69. Experience-dependent development is
    A. dependent on unique opportunities.
    B. the same fundamental milestones for all children.
    C. reaching predictable milestones.
    D. dependent on culture.

Ans: A
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

70. Which of the following is strongly canalized?
    A. IQ
    B. personality
    C. motor development
    D. emotional development

Ans: C
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

71. The geneotype -environmental correlation suggests that
    A. genes influence response to the environment.
    B. genes and environment work to reinforce each other in their interactions .
    C. the environments we are exposed to determine which genes are expressed in our phenotype.
    D. heredity restricts the development of some behaviors to few outcomes.

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

72. Bill is cooperative and attentive, and his parents give him patient responses. Judy is his distractible sister. This is an example of a(n)_____genetic-environmental correlation.
    A. passive

B. active
C. dynamic
D. evocative

Ans: D
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

73. The relationship between environment and heredity is
A. one way.
B. bidirectional.
C. strongest for intelligence.
D. measured by heritability estimates.

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

74. David, a musically talented teen, joins the school band. This is an example of a(n) _____ genetic-environmental correlation.
A. passive
B. active
C. evocative
D. dynamic

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

75. Which of the following groups does the most niche picking?
A. infants
B. toddlers
C. preschoolers
D. teens

Ans: D

Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

76. Niche picking helps us to understand why _____ report that similar stressful events are influenced by personal actions more often than other pairs.
    A. same-sex fraternal twins
    B. opposite-sex fraternal twins
    C. identical twins
    D. two adopted siblings

Ans: C
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

77. According to epigenesis,
    A. children's genetic inheritance shapes their responsiveness to the environment.
    B. heredity restricts behaviors to a few outcomes.
    C. genetics causes people to seek experiences to actualize inborn traits.
    D. development is bidirectional.

Ans: D
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

78. Baby Betsye has a healthy diet, which yields new neural connections that change gene expression. This leads to new gene–environment exchanges, which are an example of
    A. niche picking.
    B. range of reaction.
    C. epigenesis.
    D. canalization.

Ans: C
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

79. How the genotype sets the upper and lower limits for possible outcomes is known as
    A. niche picking.
    B. canalization.
    C. active effect.
    D. range of reaction.

Ans: D
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

80. The enzyme MAOA has an impact on
    A. depression in girls.
    B. violent behavior in boys.
    C. loving behavior.
    D. no emotional impact.

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

81. The term used to describe genetic variability is

    A. heritability estimates.
    B. niche picking.
    C. variability.
    D. range of reaction.

Ans: A
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

82. A concordance rate is
    A. the probability of having a child of a certain sex.

B. a measure of chromosomal abnormalities.
C. a correlation.
D. a measure of the rate at which twins share a trait.

Ans: D
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

83. Dizygotic twins
A. are more alike than regular siblings.
B. are the most common multiple birth.
C. have the same genetic makeup.
D. result from a zygote that separates into two.

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

84. The fertilization of two ova results in
A. identical twins.
B. fraternal twins.
C. monozygotic twins.
D. miscarriage.

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

85. A big difference in the traits of siblings is due to:
A. shared environments.
B. nonshared environments.
C. twinning.
D. sex-linked heritage.

Ans: B
Section Ref: Gene-Environment Interactions

Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

86. Intelligence has a heritability estimate of
    A. 0.1
    B. 0.05.
    C. 0.09.
    D. 0.5.

Ans: D
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Medium
Bloom: Knowledge

87. Intelligence is due to
    A. genetics.
    B. environment.
    C. Both genetics and environment.
    D. neither.

Ans: C
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Medium
Bloom: Knowledge

88. Problems such as _____and _____ have high concordance rates.
    A. Down syndrome; obesity
    B. schizophrenia; obesity
    C. schizophrenia; Turner's
    D. twins; boys

Ans: B
Section Ref: Gene-Environment Interactions
Learning Objective: LO 3
Difficulty: Easy
Bloom: Knowledge

89. The two major divisions of the nervous system are

A. spinal cord and brain.
B. glial and neuronal.
C. CNS and ANS.
D. PNS and CNS.

Ans: D
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Medium
Bloom: Knowledge

90. The _____ is responsible for the flight or fight response.
A. somatic nervous system
B. autonomic nervous system
C. parasympathetic nervous system
D. sympathetic nervous system

Ans: D
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

91. When you want to calm down after experiencing something exciting, you need the _____to act.
A. sympathetic nervous system
B. parasympathetic nervous system
C. autonomic nervous system
D. somatic nervous system

Ans: B
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Medium
Bloom: Knowledge

92. _____is (are) responsible for insulating neurons.
A. Glial cells
B. White matter
C. Myelin
D. Gray matter

Ans: C
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Medium
Bloom: Knowledge

93. The fundamental units of the nervous system are
    A. glial cells.
    B. neurons.
    C. somatic cells.
    D. dendrites.

Ans: B
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

94. People only use about 10% of their brains.
    A. True
    B. False

Ans: False
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

95. Which part of the neuron receives information?
    A. dendrites
    B. axons
    C. soma
    D. myelin

Ans: A
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

96. Insulating electrical wires so that the transmission is faster is much like
    A. neurogenesis.

B. neurotransmission.
C. synaptic transmission.
D. myelination.

Ans: D
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Medium
Bloom: Knowledge

97. Neural communication is both electrical and chemical.
A. True
B. False

Ans: True
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

98. Neural communication must pass through a gap between neurons known as
A. synapse.
B. the cleft.
C. myelin.
D. neurotransmitter.

Ans: A
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Medium
Bloom: Knowledge

99. _____ are the messengers that ferry across the synapse.
A. Chemicals
B. Neurotransmitters
C. Adrenaline
D. Reuptake processers

Ans: B
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

100. Which neurotransmitter is primarily responsible for mood regulation, sleep, and appetite?

A. GABA
B. dopamine
C. norepinephrine
D. serotonin

Ans: D
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

101. ESSAY: Why is the brain stem referred to as the "primitive brain"?
Hard p. 43
Answer: The brain stem is also known as the medulla and regulates survival functions, such as breathing, heart rate, and internal functions outside of conscious awareness. Injuries to this area are usually fatal.

102. Which part of the brain is best known for its role in motor and spatial coordination as well as in learning math?

A. pons
B. cerebellum
C. substantia nigra
D. reticular formation

Ans: B
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

103. The _____ is a network of connections between the thalamus, hypothalamus, amygdale, and hippocampus.

A. pituitary gland
B. cerebral cortex
C. corpus callosum
D. limbic system

Ans: D
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy

Bloom: Knowledge

104. The _____ is best known for its role in memory.

A. limbic system
B. amygdala
C. hippocampus
D. cerebrum

Ans: C
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

105. Brian tends to use his left hemisphere more than his right. This is known as

A. brain damage.
B. being a man.
C. lateralization.
D. dymbiosis.

Ans: C
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

106. Brian, in question 105, is most likely _____ handed.

A. right
B. left
C. ambidextrous
D. No one knows from this information.

Ans: A
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

107. ESSAY: Compare and contrast the functions associated with the right and left hemispheres.

pp. 45-46 Hard

Right: visual motor tasks, holistic thinking, seeing the big picture, intuition, creativity, art, music, etc.

Left: Language, speech, words, analytic thought, logic, math, science, focus on details, etc.

108. Which lobe of the brain is known to have the "executive function"?

A. frontal
B. parietal
C. occipital
D. temporal

Ans: A
Section Ref: The Physiology of Thinking and Feeling
Learning Objective: LO 4
Difficulty: Easy
Bloom: Knowledge

109. ESSAY: Explain allostasis and allostatic load.
p. 49 Hard

Our bodies need to maintain physiological stability as events and activities produce day-to-day changes in our lives. We do this through a process called *allostasis.* The autonomic nervous system is responsible for allostasis through a system called the HPA axis, so called because it involves the hypothalamus, the pituitary gland, and the adrenal glands. The HPA axis allows our blood pressure, heart rate, hormone production, and so on to increase or decrease as needed. Sometimes, though, it becomes overloaded. To understand how this happens, we need to return to the freeze–fight–flight response, which we mentioned earlier.

The freeze–fight–flight response is an immediate and automatic reaction to perceived threat that is controlled by the sympathetic nervous system (Gray, 1988; McEwen & Lasley, 2002). The freeze response makes us stop, look, and listen as we assess the threat. We attempt to flee from harm if we can or fight if we cannot. The freeze–fight–flight response was designed to deal with short-term stressors. You can imagine, for example, how helpful it might have been to our human ancestors as they faced physical threats, such as wild animals. The response should shut off once the stressors are gone, returning us to normal. When stress becomes chronic, the stress response does not shut off. The result is **allostatic load**. The same hormones—adrenaline and especially cortisol—that are helpful in responding to short-term stressors remain at higher than normal levels in the bloodstream, potentially damaging glands, organs, and the brain. Chronic stress is associated with high blood pressure, heart disease, Type 2 diabetes, loss of protein, compromised immunity, depression, fatigue, memory problems, and behavior changes.