Chapter 02
Biological Beginnings

1. _____ selection, as described by Darwin, is the evolutionary process by which those individuals of a species that are best adapted to their environment are the ones that are most likely to survive and reproduce.

A. Natural  
B. Environmental  
C. Random  
D. Necessary

Page: 36  
APA LO: 1.1  
Accessibility: Keyboard Navigation  
Bloom’s Taxonomy: Remember  
Difficulty Level: Easy  
Learning Objective: 2.1: Discuss the evolutionary perspective on life-span development.  
Topic: Natural Selection

2. According to the concept of natural selection, the best-adapted individuals:

A. are more likely to survive and leave the most offspring.  
B. are more likely to succumb to the depletion of environmental resources in an area.  
C. are less likely to reproduce than their less well-adapted peers.  
D. are not present in most cultures.

Page: 36  
APA LO: 1.2  
Accessibility: Keyboard Navigation  
Bloom’s Taxonomy: Understand  
Difficulty Level: Medium  
Learning Objective: 2.1: Discuss the evolutionary perspective on life-span development.  
Topic: Natural Selection

3. _____ psychology emphasizes the importance of adaptation, reproduction, and “survival of the fittest” in shaping behavior.

A. Psychoanalytic  
B. Cognitive  
C. Evolutionary  
D. Humanistic

Page: 37  
APA LO: 1.1  
Accessibility: Keyboard Navigation  
Bloom’s Taxonomy: Remember  
Difficulty Level: Easy  
Learning Objective: 2.1: Discuss the evolutionary perspective on life-span development.  
Topic: Evolutionary Psychology

4. According to evolutionary psychology, the observed advantage in spatial skills for men over women might be the result of:

A. better education available to males.  
B. the need to track and slay one’s food to survive.  
C. males’ tendency to play video games.  
D. males gathering seeds to plant for food.

Page: 37  
APA LO: 1.2  
Accessibility: Keyboard Navigation  
Bloom’s Taxonomy: Understand  
Difficulty Level: Medium  
Learning Objective: 2.1: Discuss the evolutionary perspective on life-span development.  
Topic: Evolutionary Psychology

5. According to evolutionary developmental psychologists, many evolved psychological mechanisms are ______. That is, the mechanisms apply only to a specific aspect of a person’s psychological makeup.

A. domain specific  
B. maladjusted  
C. nonoperational  
D. general-purpose devices

Page: 37  
APA LO: 1.1  
Accessibility: Keyboard Navigation  
Bloom’s Taxonomy: Remember  
Difficulty Level: Easy  
Learning Objective: 2.1: Discuss the evolutionary perspective on life-span development.
6. The food-scarce environment of our ancestors likely led to humans’ propensity to gorge when food is available and to crave high-caloric foods—a trait that might lead to an epidemic of obesity when food is plentiful. This illustrates how:
A. socialization influences the development of behavior and cognitive skills in human beings.
B. evolved mechanisms are not always adaptive in contemporary society.
C. organisms pass on characteristics they had acquired during their lifetime to their offspring.
D. the benefits of evolutionary selection decrease with age.

7. Which of the following is NOT a criticism of the evolutionary perspective?
A. It is “one-sided evolutionism” and gives less attention to cognitive factors.
B. It is so easy to test that it creates more studies than can be followed.
C. It is difficult to refute because evolution occurs on such a grand time scale.
D. It does not dictate behavior.

8. _____, the units of hereditary information, are short segments of DNA. They direct cells to reproduce themselves and to assemble proteins.
A. Genes
B. Chromosomes
C. RNA
D. Ribosomes

9. The nucleus of each human cell contains _____, which are threadlike structures made up of deoxyribonucleic acid (DNA).
A. mitochondria
B. ribosomes
C. chromosomes
D. mesosomes

10. _____ are the building blocks of cells as well as the regulators that direct the body’s processes.
A. Genes
B. Proteins
C. Ribosomes
D. DNA

11. Which is NOT true of the genome-wide association method?
A. Its success led to the start of the Human Genome Project.
B. It involves machines that scan cells for variations in cells.
C. It is used to identify genetic variations linked to particular diseases.
D. It requires studying DNA from those with and without a particular disease.

12. Dr. Pamarti is studying breast cancer by obtaining DNA samples from women who have breast cancer and those who don’t, and completing genetic profiles on each group to find where the genetic differences are. This method is called:
A. genome-wide association.
B. genome-chromosome association.
C. genetic-protein association.
D. genetic-fertilization association.

13. The textbook reports that new studies using the genome-wide association method have focused on all of the following EXCEPT:
A. obesity.
B. cardiovascular disease.
C. glaucoma.
D. anxiety.

14. According to recent studies, the number of protein-producing genes is predicted to be:
A. greater than 100,000.
B. greater than 200,000.
C. less than 5,000.
D. less than 20,000.

15. Which of the following is TRUE regarding genes?
A. Each gene corresponds with one specific protein.
B. Genes act independently of each other.
C. Humans have more genes than proteins.
D. Genetic expression is influenced by the environment.

16. Which of the following statements about the activity of genes is TRUE?
A. Genes are not collaborative.
B. A single gene codes for a single, specific protein.
C. Genetic expression is unaffected by environmental factors.
D. Events inside of the cell can excite or inhibit genetic expression.
17. Which of the following was NOT a finding in the study of sleep deprivation and genetic expression described in the textbook? 
A. It increased inflammation.  
B. It increased cortisol production.  
C. It impaired protein functioning.  
D. It prompted the expression of stress-related genes.

18. _____ is a stage in reproduction whereby an egg and a sperm fuse to create a single cell. 
A. Fertilization  
B. Osmosis  
C. Meiosis  
D. Mitosis

19. During the process of _____, the cell’s nucleus—including the chromosomes—duplicates itself and the cell divides, resulting in the formation of two cells. 
A. meiosis  
B. osmosis  
C. fertilization  
D. mitosis

20. Which of the following is TRUE of mitosis in humans? 
A. Mitosis is the cellular reproduction that occurs in the sperm and egg cells.  
B. Mitosis results in the formation of four new cells.  
C. Mitosis results in the formation of new cells with 23 pairs of chromosomes.  
D. Mitosis results in the formation of three new cells.

21. During _____, a cell of the testes in men or ovaries in women duplicates its chromosomes and then divides twice, thus forming four cells, each of which has only half the genetic material of the parent cell. 
A. meiosis  
B. mitosis  
C. osmosis  
D. fertilization
22. In human beings, by the end of meiosis, each egg or sperm has _____ chromosomes.
   A. 46 paired
   B. 23 unpaired
   C. 23 paired
   D. 46 unpaired

23. During fertilization, an egg and a sperm fuse to create a single cell called a:
   A. blastocyst.
   B. fetus.
   C. gamete.
   D. zygote.

24. A mistake by the cellular machinery, or damage from an environmental agent such as radiation, may produce a _____, which is a permanently altered segment of DNA.
   A. susceptibility gene
   B. vulnerability gene
   C. longevity gene
   D. mutated gene

25. _____ genes are those that make the individual more vulnerable to specific diseases or acceleration of aging, whereas ____ genes make the individual less vulnerable to certain diseases and more likely to live to an older age.
   A. Susceptibility; longevity
   B. Longevity; mutated
   C. Vulnerability; susceptibility
   D. Mutated; good

26. Ethel is 50 years old but appears much more aged in appearance. Most of Ethel’s relatives don’t live past the age of 60. Which of the following genes are responsible for the accelerated aging that is observed in Ethel and her family members?
   A. Susceptibility genes
   B. Longevity genes
   C. Vulnerability genes
   D. Mutated genes
27. _____ genes are those that make the individual less vulnerable to certain diseases and more likely to live to an older age.
A. Susceptibility
B. Longevity
C. Vulnerability
D. Mutated

28. Erin is 90 years old. She has relatively good health and is fully mobile. Most of Erin’s blood relatives lived to a much later age than most of their same-age friends. Which of the following genes might be responsible for this?
A. Susceptibility genes
B. Longevity genes
C. Vulnerability genes
D. Mutated genes

29. Emma and Anna are identical twins who were adopted by different families a few weeks after birth. Although genetically identical, they grew up with different physical and psychological characteristics. For example, though both inherited a tendency to grow large, Anna was slim and athletic due to the active lifestyle practiced in her adoptive family. This variability can be explained by how:
A. each zygote is unique.
B. longevity genes can make an individual less vulnerable to certain diseases.
C. for each genotype, a range of phenotypes can be expressed.
D. mutated genes can be a source of genetic variability.

30. _____ is the way an individual’s genotype is expressed in observable and measurable characteristics.
A. RNA
B. DNA
C. Phenotype
D. Stereotype

31. Marly describes her friend, Gina, as having blonde hair, green eyes, and fair skin with freckles. Marly has described Gina’s:
A. genotype.
B. genetic imprint.
C. phenotype.
D. X-linked inheritance.
32. Joseph was born with the potential to be quite tall; however, during his childhood his family struggled and he didn’t have a nutritious diet. The result is that Joseph is not as tall as his parents. Another way of describing Joseph’s situation is that his ______ was(were) not expressed in his _____.
A. phenotype; genotype
B. susceptibility genes; longevity genes
C. genotype; phenotype
D. longevity genes; susceptibility genes

33. In some cases, one gene of a pair always exerts its effects, overriding the potential influence of the other gene. This is the _____ principle.
A. sex-linked genes
B. dominant-recessive genes
C. genetic imprinting
D. polygenic inheritance

34. Clark’s genotype contains a dominant gene for brown eye color and a recessive gene for blue eye color. According to the dominant-recessive gene principle, which of the following phenotypes is most likely to be observed in Clark?
A. Black eyes
B. Blue eyes
C. Grey eyes
D. Brown eyes

35. Mary’s mother has blonde hair and her father has brown hair. Mary has a gene for brown hair and a gene for blonde hair. She has brown hair. This indicates that the gene for brown hair is a:
A. dominant gene.
B. recessive gene.
C. susceptible gene.
D. longevity gene.

36. Carrie’s parents both have brown hair. However, Carrie gets genes for blonde hair from both parents, and as a result she has blonde hair. This indicates that the gene for blonde hair is a:
A. recessive gene.
B. dominant gene.
C. susceptibility gene.
D. longevity gene.

37. A recessive gene exerts its influence only if:
A. both genes in a pair are recessive.
B. it is the stronger gene.
C. the environment is right.
D. the dominant gene is also present in the pair.

38. Who is MOST likely to develop an X-linked disease?
A. Males
B. Females
C. Children of either gender
D. People with blonde hair

39. According to your text, gene-gene interactions have been documented in all of the following EXCEPT:
A. alcoholism.
B. asthma.
C. arthritis.
D. anxiety.

40. _____ is caused by the presence of an extra copy of chromosome 21.
A. Down syndrome
B. Hemophilia
C. Huntington’s disease
D. Sickle-cell anemia

41. Jason was born with _____. The doctor tells his parents that compared to his peers, he will have a round face, flattened skull, an extra fold of skin over his eyelids, a thickened tongue, short limbs, and some intellectual difficulties.
A. fragile X syndrome
B. Klinefelter disease
C. Down syndrome
D. Tay-Sachs disease

42. Which of the following is TRUE of Down syndrome?
A. It primarily occurs in African-American children.
B. It occurs when genetic imprinting goes awry.
C. Its symptoms include retardation of motor and mental abilities.
D. It is caused by the presence of an extra copy of chromosome Y.
43. Which of the following women has the highest probability of giving birth to a child with Down syndrome?

A. Sarah, a 21-year-old Asian woman
B. Jane, a 41-year-old Euro-American woman
C. Ella, a 27-year-old African-American woman
D. Destiny, a 38-year-old African-American woman

44. Klinefelter syndrome affects:

A. only males.
B. only females.
C. both males and females equally.
D. more females than males.

45. Klinefelter syndrome occurs when an individual has a chromosomal pattern of:

A. XY.
B. XX.
C. XXY.
D. XYY.

46. Tristan has a genetic disorder that results from an abnormality in the X chromosome, which becomes constricted and often breaks. His doctor told Tristan’s mother that he has:

A. fragile X syndrome.
B. XYY syndrome.
C. Turner syndrome.
D. Tay-Sachs disease.

47. Angelique has a chromosomal disorder characterized by a missing X chromosome, making her XO instead of XX. Angelique’s doctors have diagnosed her with:

A. fragile X syndrome.
B. XYY syndrome.
C. Klinefelter syndrome.
D. Turner syndrome.
48. Renee is short and has a webbed neck. While she is good in language-related classes, she struggles with math. Having determined she has a chromosomal disorder, doctors have diagnosed her with:
A. fragile X syndrome.
B. XYY syndrome.
C. Klinefelter syndrome.
D. Turner syndrome.

49. Which of the following is found more often in females?
A. Turner syndrome
B. XYY syndrome
C. Klinefelter syndrome
D. Fragile X syndrome

50. Which of the following is TRUE of phenylketonuria?
A. It results from a recessive gene.
B. It may be treated with insulin.
C. It results in death by five years of age.
D. It is caused by an accumulation of lipids in the nervous system.

51. Which of the following is a gene-linked abnormality?
A. Down syndrome
B. Phenylketonuria (PKU)
C. Turner syndrome
D. Klinefelter syndrome

52. Paul suffers from hemophilia, so he is very concerned every time he gets a cut. His best treatment option is:
A. insulin.
B. blood transfusions.
C. physical therapy.
D. corrective surgery at birth.
53. Samantha has been diagnosed with _____, which is a glandular dysfunction that interferes with mucus production.
A. cystic fibrosis
B. Huntington’s disease
C. PKU
D. Tay-Sachs disease

54. Mary and Jim are expecting a child, and prenatal diagnostic procedures have confirmed that the fetus has _____, a neural tube disorder that causes brain and spine abnormalities. Their physician has explained that this gene-linked abnormality could be treated with corrective surgery at birth, orthopedic devices, and physical or medical therapy.
A. spina bifida
B. Tay-Sachs disease
C. PKU
D. Huntington’s disease

55. Lindsay’s body does not produce enough insulin, causing an abnormal metabolism of sugar. She is receiving insulin treatment. Lindsay has:
A. spina bifida.
B. hemophilia.
C. PKU.
D. diabetes.

56. Joshua, two, has been diagnosed with _____, a disorder that is found more often in the American Jewish population. Unfortunately, for most children with this abnormality death is likely by age five.
A. spina bifida
B. Tay-Sachs disease
C. sickle-cell anemia
D. Huntington’s disease

57. Benny has been diagnosed with a gene-linked abnormality characterized by deceleration of mental and physical development caused by an accumulation of lipids in the nervous system. He has been put on medication and a special diet, but his family has been told that he will probably not live beyond the age of five. Benny is suffering from:
A. spina bifida.
B. Tay-Sachs disease.
C. phenylketonuria.
D. Huntington’s disease.
58. Tamera has a genetic disorder where her red blood cells take on a hook shape instead of the normal disk shape. The doctors tell Tamera’s parents that she has _____.
A. Tay-Sachs disease
B. sickle-cell anemia
C. leukemia
D. Huntington’s disease

59. _____ is the field that seeks to discover the influence of heredity and environment on individual differences in human traits and development.
A. Behavior influence
B. Behavior therapy
C. Behavior genetics
D. Behavior development

60. Rachel loves to read books and also encourages her daughter to read by regularly taking her to the local library so she can check out lots of books. Rachel’s daughter is now an avid reader. This reflects a(n) _____ correlation.
A. passive genotype–environment
B. evocative genotype–environment
C. influential genotype–environment
D. active (niche-picking) genotype–environment

61. Tracy’s parents are avid sports fans. Since she was a child, they took her to numerous baseball and football games, and Tracy regularly watched the sports channel with her dad. When she was old enough, her parents allowed her to join the little league team at her school and she performed well. This is an example of a(n): 
A. evocative genotype–environment correlation.
B. active (niche-picking) genotype–environment correlation.
C. passive genotype–environment correlation.
D. gene–gene correlation.

62. _____ correlations occur because a child’s genetically influenced characteristics elicit certain types of environments.
A. Passive genotype–environment
B. Evocative genotype–environment
C. Influential genotype–environment
D. Active (niche-picking) genotype–environment
63. Charlie is a cooperative, attentive child who is a favorite at home and school and receives positive, instructive responses from adults. This is indicative of a(n):
A. passive genotype–environment correlation.
B. evocative genotype–environment correlation.
C. influential genotype–environment correlation.
D. active (niche-picking) genotype–environment correlation.

64. Timothy is a quiet six-year-old who is usually withdrawn in class. As a result, he does not receive much attention from his peers and mostly plays by himself. According to Sandra Scarr, this is an example of a(n):
A. passive genotype–environment correlation.
B. active (niche-picking) genotype–environment correlation.
C. gene × environment (G × E) interaction.
D. evocative genotype–environment correlation.

65. Brad is an athletic boy who is on every sports team in school. Stephen loves math and is part of his school’s math club. These instances reflect _____ correlations that occur when children seek out environments that they find compatible and stimulating.
A. passive genotype–environment
B. evocative genotype–environment
C. active (niche-picking) genotype–environment
D. influential genotype–environment

66. Which of the following is an example of a passive genotype–environment correlation?
A. Uncooperative, distractible children receive more unpleasant and disciplinary action from parents and teachers.
B. Outgoing children tend to seek out social contexts in which to interact with people.
C. Parents who have a genetic predisposition to be musically inclined encourage their children to learn how to play a musical instrument.
D. Infants who smile more receive more attention from individuals in their social environment.

67. The _____ view states that development is the result of an ongoing, bidirectional interchange between heredity and the environment.
A. epigenetic
B. biosocial
C. sociogenetic
D. socioenvironmental

68. _____ is the interaction of a specific measured variation in the DNA and a specific measured aspect of the environment.
A. Heredity–environment correlation
B. Evocative genotype–environment correlation
C. Gene × environment (G × E) interaction
D. Passive genotype–environment interaction

Page: 48
APA LO: 1.1
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Remember
Difficulty Level: Easy
Learning Objective: 2.4: Explain some of the ways that heredity and environment interact to produce individual differences in development.
Topic: Gene X Environment Interaction

69. Recent studies have shown that individuals with a short version of a gene labeled five-HTTLPR have an elevated risk of developing depression, but only if they also lead stressful lives. This is an example of:
A. heredity–environment correlation.
B. evocative genotype–environment correlation.
C. gene × environment (G × E) interaction.
D. passive genotype–environment interaction.

Page: 48
APA LO: 1.2
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Understand
Difficulty Level: Medium
Learning Objective: 2.4: Explain some of the ways that heredity and environment interact to produce individual differences in development.
Topic: Gene X Environment Interaction

70. Which of the following is in the correct order of the three periods in prenatal development from conception to birth?
A. Fertile, embryonic, postterm
B. Preterm, germinal, postterm
C. Gestational, germinal, postnatal
D. Germinal, embryonic, fetal

Page: 49
APA LO: 1.2
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Understand
Difficulty Level: Medium
Learning Objective: 2.5: Describe prenatal development.
Topic: Germinal Period

71. Rachel is in the first period of prenatal development, just following fertilization. Even though she doesn’t know it, she is in the _____ period of prenatal development.
A. fetal
B. embryonic
C. implantation
D. germinal

Page: 49
APA LO: 1.3
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Apply
Difficulty Level: Hard
Learning Objective: 2.5: Describe prenatal development.
Topic: Germinal Period

72. The zygote first begins rapid cell division in the _____ period of prenatal development.
A. fetal
B. embryonic
C. implantation
D. germinal

Page: 49
APA LO: 1.1
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Remember
Difficulty Level: Easy
Learning Objective: 2.5: Describe prenatal development.
Topic: Germinal Period

73. _____ refers to the attachment of the blastocyst to the uterine wall.
A. Implantation
B. Conception
C. Fertilization
74. Which of the following is NOT true of the germinal period?
A. The blastocyst implants in the uterus within the first five days after conception.
B. Fertilization occurs in the upper third of the fallopian tube.
C. The blastocyst forms in four days after conception.
D. Sperm and egg chromosome materials unite within three days after conception.

75. The _____ is the outer layer of cells of the blastocyst that later provides nutrition and support for the embryo.
A. ectoderm
B. perineum
C. cytocyst
D. trophoblast

76. Which of the following is a feature of the embryonic period of prenatal development?
A. The creation of the fertilized egg
B. Formation of the blastocyst
C. The attachment of the zygote to the uterine wall
D. Formation of support systems for cells

77. Wren is four weeks pregnant. Which of the following stages of prenatal development is Wren currently in?
A. Embryonic
B. Fetal
C. Placental
D. Germinal

78. The _____ consists of three layers of cells: the endoderm, the mesoderm, and the ectoderm.
A. blastocyst
B. fetus
C. embryo
D. trophoblast
79. During your physiology course the instructor asks, “Moving from the outer layer of embryonic cells to the inner layer, what are the layers called?”
You immediately write down:
A. endoderm, epidermis, ectoderm, mesoderm.
B. ectoderm, epidermis, mesoderm, endoderm.
C. ectoderm, endoderm, mesoderm.
D. ectoderm, mesoderm, endoderm.

80. The embryo’s _____ develops into the digestive and respiratory systems.
A. ectoderm
B. endoderm
C. trophoblast
D. mesoderm

81. The _____ is a layer of the embryo which will become the circulatory system, bones, muscles, excretory system, and reproductive system.
A. endoderm
B. ectoderm
C. mesoderm
D. epidermis

82. All body parts eventually develop from the layers of the embryo, with the _____ producing the internal parts and the _____ producing the surface parts.
A. endoderm; mesoderm
B. mesoderm; endoderm
C. endoderm; ectoderm
D. ectoderm; endoderm

83. The _____ is a layer of the embryo, which will become the nervous system and brain, sensory receptors, and skin parts.
A. mesoderm
B. ectoderm
C. trophoblast
D. endoderm
84. Sherry is expecting her second child. She bought a book to help her daughter understand how the new baby is developing in the womb. After learning some terms, Sherry asks her daughter, “Which part will develop into hair and fingernails?” The answer is the:
A. mesoderm.
B. ectoderm.
C. trophoblast.
D. endoderm.

85. In a nursing class the instructor explains the vulnerability of the organ systems during formation, such as the respiratory and circulatory systems, to environmental influences. This process of organ formation is called:
A. organodevelopment.
B. organogenesis.
C. systemization.
D. differentiation.

86. A group of tissues in which small blood vessels from the mother and offspring intertwine but do not connect is the:
A. amnion.
B. placenta.
C. embryo.
D. umbilical cord.

87. The structure that contains two arteries and one vein, and connects the developing embryo to the mother’s body, is called the:
A. amnion.
B. placenta.
C. embryo.
D. umbilical cord.

88. Both the amnion and the _____ develop from the fertilized egg and not the mother’s body.
A. endoderm
B. placenta
C. embryo
D. umbilical cord

89. Sherry is expecting her second child. Her daughter is very curious about the developing embryo. When walking outside on a cold day, her daughter asks, “Is the baby cold too?” Sherry explains that the _____ provides temperature control for the baby.
A. umbilical cord
B. amniotic fluid  
C. placenta  
D. ectoderm

90. The _____ is like a bag or an envelope and contains a clear fluid in which the developing embryo floats.  
A. placenta  
B. umbilical cord  
C. amnion  
D. cervix

91. The _____ provides an environment that is temperature- and humidity-controlled, as well as shockproof.  
A. placental wall  
B. pericardial fluid  
C. umbilical cord  
D. amniotic fluid

92. Which of the following cannot pass through the placenta?  
A. Red blood cells  
B. Ethanol from alcohol  
C. Oxygen  
D. Salt

93. The _____ prevents large molecules like red blood cells and harmful substances, such as most bacteria and maternal wastes, from entering the fetus.  
A. umbilical cord  
B. placental wall  
C. amniotic sheath  
D. ectoderm

94. Which of the following is a small molecule that would be able to pass through the placental wall?  
A. Red blood cells  
B. Carbon dioxide  
C. Hormones  
D. Maternal wastes
95. Which of the following substances is a large molecule that would NOT be able to pass through the placental wall?
A. Salt
B. Water
C. Hormones
D. Carbon dioxide

96. Which of the following is NOT accurate regarding studies of the placental barrier?
A. Cigarette smoke weakens fetal membranes.
B. Cortisol, a stress hormone, can cross from mother to her developing baby.
C. Most bacteria can pass from mother to her developing baby.
D. Ethanol from mother’s alcohol use can pass to her developing baby.

97. Petra is at the fourth month of her pregnancy. Her unborn child is now referred to as a(n):
A. gamete.
B. zygote.
C. fetus.
D. embryo.

98. Sara is so anxious to actually feel her baby moving in the womb. Her doctor tells her that usually mothers first feel the arm or leg movements of their baby around the end of the _____ month of pregnancy.
A. second
B. third
C. fourth
D. fifth

99. The fetus that Calista is carrying has just reached the age of viability, meaning that it has a chance of surviving outside of the womb. Therefore, it can be inferred that Calista is _____ weeks pregnant.
A. 4 to 8
B. 16 to 18
C. 24 to 25
D. 10 to 12
100. Nerve cells that handle information processing at the cellular level in the brain are called:
A. aminoplasts.
B. neurotransmitters.
C. endoderms.
D. neurons.

101. By the time babies are born, they have approximately _____ neurons.
   A. 10 million
   B. 200 million
   C. 1 billion
   D. 100 billion

102. The phases of the brain’s development during the prenatal period include all of the following EXCEPT:
   A. formation of the neural tube.
   B. neurogenesis.
   C. neuronal migration.
   D. synaptic pruning.

103. Before Jared was born, his neural tube did not close properly. He uses crutches and braces to move around. At the time of her pregnancy, his mother was grossly overweight. All these signs point to a conclusion that Jared has a condition called:
   A. organogenesis.
   B. spina bifida.
   C. neurogenesis.
   D. anencephaly.

104. A strategy that can help to prevent neural tube defects is for women to:
   A. eat food rich in vitamin C.
   B. take adequate amounts of the B vitamin folic acid.
   C. take medication for diabetes.
   D. eat food that is not contaminated with mercury.

105. Neuronal migration occurs at approximately _____ weeks after conception.
106. Neuronal _____ involves moving outward from the original location, reaching a target destination, and maturing to become part of a complex structure.
A. generation
B. genesis
C. mitosis
D. migration

107. Gwendolyn is having a prenatal test where her doctor uses high-frequency sound waves directed into her abdomen to check on her fetus. Her doctor is checking for many things, including spina bifida. She is most likely having a(n):
A. chorionic villus sampling.
B. triple screen.
C. amniocentesis.
D. ultrasound sonography.

108. Which of the following is NOT a test used by physicians to determine whether a fetus is developing normally?
A. Ultrasound sonography
B. Fetal MRI
C. Maternal blood screening
D. Bayley Scales of Infant Assessment

109. Amniocentesis is typically performed between:
A. weeks 2 and 4 of pregnancy.
B. weeks 8 and 12 of pregnancy.
C. weeks 15 and 18 of pregnancy.
D. weeks 25 and 28 of pregnancy.

110. Glenda’s doctor gives her the unfortunate news that her ultrasound is showing the possibility of some abnormalities. She wants to know more as soon as possible, so her doctor ordered a(n) _____ to get a clearer, more detail image.
A. fetal MRI
B. maternal blood screening
111. Wanda’s doctor says she needs a maternal blood screening to determine the risk for birth defects. The doctor recommends the ______ screen, which is the most current test available.
A. single
B. double
C. triple
D. quadruple

112. Esperanza is having a prenatal test to remove a small sample of the placenta for genetic testing. Identify the test that her doctor is performing.
A. Chorionic villus sampling
B. Amniocentesis
C. NIPD
D. Triple screen

113. Which of the following can determine the sex of a fetus at the earliest point?
A. Ultrasound
B. Chorionic villus sampling (CVS)
C. Noninvasive cell-free DNA analysis in blood plasma
D. Amniocentesis

114. Approximately _____ of couples in the United States are unable to conceive a child after 12 months of regular intercourse without conception.
A. 5% to 10%
B. 10% to 15%
C. 15% to 20%
D. 20% to 25%

115. The process of _____ involves fertilizing eggs in a laboratory dish and transferring those eggs to a woman’s uterus.
A. neural migration
B. fetal MRI
C. chorionic villus sampling
D. in vitro fertilization
116. A “test tube baby” is associated with which process?
A. Neural migration  
B. Fetal MRI 
C. Chorionic villus sampling  
**D. In vitro fertilization**

117. A teratogen is any agent that can cause:
A. organogenesis.  
B. birth defects.  
C. fetal movement.  
D. maternal back pain.

118. Which of the following statements is TRUE regarding the impact of teratogens?
A. Very few fetuses are exposed to teratogens, so it is easy to determine which teratogen causes which defect.  
B. Fetuses are safe from the effects of teratogens during the first trimester.  
C. Teratogens cause anatomical defects only after organogenesis is complete.  
**D. Exposure to teratogens does more damage when it occurs at some points in development than at others.**

119. During which period of development is the unborn baby MOST at risk of developing a structural defect due to the effects of a teratogen?
A. At conception  
B. During the germinal period  
C. During the embryonic period  
**D. During the fetal period**

120. ____ act on the nervous system to alter states of consciousness, modify perceptions, and change moods. 
A. Antiemetics  
B. Biofeedback therapies  
C. Antihypertensives  
**D. Psychoactive drugs**
121. Brian is very upset because he and his girlfriend, who is only a few weeks into her pregnancy, just found out that caffeine is a(n):
A. hormone.
B. antibiotic.
C. psychiatric drug.
D. psychoactive drug.

122. Which of the following is recommended by the U.S. Food and Drug Administration?
A. Pregnant women should consume no caffeine or consume it only sparingly.
B. Pregnant women can consume as much caffeine as they want in chocolate but not in coffee.
C. Pregnant women can safely drink three cups of coffee each day after the third month of pregnancy.
D. Pregnant women should avoid caffeine in soda or tea but can consume caffeine safely through coffee.

123. Stella wants to give her baby the best start during prenatal development, so she is researching the latest findings on nutrition and teratogens. She’s frustrated because the findings on caffeine:
A. have been mixed on whether it has ill effects.
B. have demonstrated no ill effects, but everyone says to avoid it anyway.
C. have demonstrated substantial ill effects.
D. hardly exist because no one is studying it.

124. Which of the following is the U.S. Surgeon General’s recommendation regarding alcohol intake during pregnancy?
A. It is wise to consume alcohol in moderation at the time of conception.
B. One or two servings of beer or wine a few days a week can have positive effects on the fetus.
C. No alcohol should be consumed during pregnancy.
D. One or two servings of hard liquor a few days a week can have positive effects on the fetus.

125. Alicia is pregnant and a heavy smoker. Which of the following is her baby MORE likely to have than is the baby of a nonsmoker?
A. Facial and limb deformities
B. Sudden infant death syndrome
C. Cleft palate
D. Tremors and increased general irritability

126. Julianne lost her baby early in her pregnancy. Which of the following paternal factors could have possibly led to this outcome?
A. Her partner was overweight.
B. Her partner was a heavy smoker, even during her pregnancy.
C. Her partner is deficient in vitamin C.
D. Her partner was undergoing severe emotional stress during her pregnancy.

127. Which of the following statements about cocaine use during pregnancy is true?
A. Cocaine quickly crosses the placenta to reach the fetus.
B. Cocaine is broken down in the mother’s bloodstream before it can reach the fetus.
C. Cocaine molecules are too large to pass through the placenta.
D. Cocaine exposure during prenatal development has no negative effects on the fetus.

128. Which of the following is TRUE about the effects of cocaine use by pregnant women?
A. Cocaine exposure during prenatal development is associated with increased birth weight.
B. Prenatal cocaine exposure has been linked to higher arousal.
C. Cocaine exposure during prenatal development is associated with reduced length and head circumference.
D. Children born to cocaine users exhibit higher quality of reflexes at one month of age.

129. Which of the following statements about the effects of marijuana exposure on offspring is true?
A. Research has concluded that marijuana use by pregnant women is associated with motoric deficits in their offspring.
B. Research has indicated that mothers who use marijuana while pregnant have a higher risk of having a child who develops depression by age 10.
C. Research has shown that mothers who use marijuana while pregnant risk their offspring using marijuana by age 14.
D. Research has concluded that controlled doses of marijuana are associated with increased memory in the developing offspring.

130. Which of the following is NOT associated with the use of marijuana during pregnancy?
A. Stillbirth
B. Lower intelligence in children
C. Use of marijuana by the offspring at a later age
D. High self-esteem

131. The most common treatment for heroin addiction, methadone, is associated with:
A. very low birth weight in newborns.
B. very severe withdrawal symptoms in newborns.
C. lower intelligence in children.
D. lower quality of reflexes at one month of age.
132. Lily is seeing her dentist for a routine checkup, and finds it is time for updated dental x-rays. Her dentist asks Lily if she is pregnant because, in terms of teratogenic effects, x-ray radiation is an example of:

A. a prescription drug.
B. an environmental hazard.
C. a maternal disease.
D. a paternal factor.

133. Which of the following diseases is transmitted to the newborn during delivery through the birth canal?
A. Diabetes
B. West Nile virus
C. Rubella
D. Genital herpes

134. Sylvia is almost nine months pregnant and very close to her delivery date. The doctors have found that she has an active case of genital herpes. Which of the following is the best course of action to prevent Sylvia’s baby from contracting the disease?
A. Perform a cesarean section
B. Terminate the pregnancy
C. Deliver the baby through the birth canal
D. Give the baby blood transfusions

135. Which of the following maternal diseases is likely to be transmitted to the infant through breast feeding?
A. Rubella
B. Syphilis
C. Genital herpes
D. AIDS

136. Which of the following maternal diseases carries the risk of delivering very large infants, weighing 10 pounds or more?
A. Genital herpes
B. AIDS
C. Gestational diabetes
D. Syphilis
137. Maternal obesity has been linked to all of the following EXCEPT:
A. stillbirth.
B. diabetes.
C. extreme preterm delivery.  **D.** cleft palate.

138. Marlena, who just found out she is pregnant, has very poor eating habits. Her total calorie intake is very low. She eats very little protein and unbalanced amounts of vitamins and minerals. If she continues her present eating habits, which of the following is MOST likely to occur?
A. The baby will not be affected.
B. The baby will develop Down syndrome.
C. The baby is more likely to be malformed.
D. The baby is more likely to have severe withdrawal symptoms.

139. Priscilla just found out she is pregnant and her doctor prescribed a B-complex vitamin that promotes normal prenatal development and reduces the risk of preterm deliveries. Which of the following is the vitamin that Priscilla’s doctor has prescribed?
A. Thiamine
B. Riboflavin
C. Pantothenic acid
**D.** Folic acid

140. What is the recommended daily dosage of folic acid for pregnant women, as issued by the U.S. Department of Health and Human Services?
A. 100 milligrams
B. 200 micrograms
C. 200 milligrams
**D.** 400 micrograms

141. Identify the age group of women who are LEAST likely to obtain prenatal care.
A. Late twenties
B. Early thirties
C. **Adolescence**
D. Early forties

142. Which maternal age group has increased risk of low birth weight, preterm delivery, and fetal death?
A. Age 18 years or younger
B. Between 18 and 25 years
C. Between 19 and 30 years
**D. Age 35 years and older**

Page: 61
APA LO: 1.2
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Understand
Difficulty Level: Medium
Learning Objective: 2.5: Describe prenatal development.
Topic: Teratogen

143. Down syndrome has been linked to:
A. maternal obesity.
B. poor maternal nutrition.
C. paternal stress.
**D. maternal age.**

Page: 61
APA LO: 1.2
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Understand
Difficulty Level: Medium
Learning Objective: 2.5: Describe prenatal development.
Topic: Teratogen

144. According to a recent study, high levels of depression, anxiety, and stress during pregnancy were linked to children with:
A. high birth weight.
B. greater extraversion.
C. physical disabilities.
**D. hyperactivity.**

Page: 61
APA LO: 1.2
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Understand
Difficulty Level: Medium
Learning Objective: 2.5: Describe prenatal development.
Topic: Teratogen

145. ____ replaces traditional 15-minute physician visits with 90-minute peer group support settings and self-examination led by a physician or certified nurse-midwife.
A. **CenteringPregnancy**
B. The use of doulas
C. The use of professional midwives
D. Nurse Family Partnership

Page: 63
APA LO: 1.1
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Remember
Difficulty Level: Easy
Learning Objective: 2.5: Describe prenatal development.
Topic: Prenatal Care

146. Jessica is feeling empowered and supported in the ____ care program. She is looking forward to the approximately 50 home visits, guiding her through the prenatal period and in parenting until her child is two years of age.
A. Nurse Family Partnership
B. CenteringPregnancy
C. Maxx Family Life
D. Prenatal Care Assistance

Page: 63
APA LO: 1.3
Accessibility: Keyboard Navigation
Bloom’s Taxonomy: Apply
Difficulty Level: Hard
Learning Objective: 2.5: Describe prenatal development.
Topic: Prenatal Care

147. The CenteringPregnancy program:
A. uses the newest prenatal diagnostic tests to assess the developing fetus.
B. uses group settings and longer sessions to help prepare women for positive pregnancy experiences.
C. is not endorsed by physicians and midwives.

2-28
D. has increased the number of preterm births and extremely preterm births among its participants.

148. The second stage of childbirth begins with the _____ and ends with the _____.
A. emergence of the child’s head; delivery of the placenta
B. opening of the cervix; delivery of the child out of the mother
C. emergence of the child’s head; delivery of the child out of the mother
D. opening of the cervix; delivery of the placenta

149. Naveen is entering the third stage of childbirth, also known as the _____ stage.
A. postpartum
B. umbilical procedure
C. afterbirth
D. detachment

150. After a long evening of natural childbirth, and seeing her son for the first time, Dalia is relieved to be in_____, the shortest of the three birth stages.
A. involution
B. afterbirth
C. implantation
D. waterbirth

151. Which of the following is TRUE of the stages of childbirth?
A. The first stage terminates when the baby completely emerges from the mother’s body.
B. Uterine contractions start in the final stage of the birth process.
C. The first stage is the longest of the three birth stages.
D. The first stage of birth is longer for a woman who is having her second or third child.

152. In the United States, approximately how many infants are delivered by midwives?
A. Less than 10%
B. 30%
C. 50%
D. 75%
153. A _____ is a caregiver who provides continuous physical, emotional, and educational support for the mother before, during, and after childbirth.
A. doula
B. midwife
C. physician
D. paramedic

154. Jerrold and his wife are considering medication options for the birth of their daughter. They decide on a method used to numb a woman’s body from the waist down during the birthing process. They have chosen to use:
A. an antibiotic.
B. an epidural block.
C. pitocin.
D. alcohol.

155. A delivery in which no drugs are given to relieve pain or assist in the birth process is called:
A. a cesarean delivery.
B. natural childbirth.
C. induced childbirth.
D. forced childbirth.

156. _____ is a popular form of childbirth in the United States that involves special breathing in the final stages and the help of a coach.
A. Cesarean delivery
B. Lamaze method
C. Induced childbirth
D. Waterbirth

157. Karen is preparing to give birth to her child and has requested that no drugs be administered to help relieve pain or assist in the birth. Karen wants:
A. a cesarean delivery.
B. natural childbirth.
C. induced childbirth.
D. forced childbirth.

158. The rationale for waterbirth is:
A. it costs less than a hospital birth.
B. the baby has been in the amniotic sac, so the water will feel familiar.
C. it’s best for a breech birth.
D. it reduces the mother’s pain more than other options available today.

159. What is the rationale for the practice of waterbirth?
A. Water pressure reduces the strain of contractions.
B. It creates an environment similar to that inside the amniotic sac.
C. Getting into water speeds up the labor process.
D. Water makes the contractions more intense.

160. _____ position refers to the baby’s position in the uterus that causes the buttocks to be the first part to emerge from the vagina.
A. Fetal
B. Breech
C. Asynclitic
D. Standard

161. Leslie is worried and distressed because her doctor told her that her birth would be difficult because her baby was in position to come out buttocks first. Her doctor recommends she:
A. use massage therapy.
B. use music therapy.
C. use acupuncture.
D. have a cesarean section delivery.

162. Which of the following is a threat to the infant caused by the breech position?
A. Bone malformation
B. Down syndrome
C. Respiratory problems
D. Spina bifida

163. Pilar is using nonmedical techniques for pain management during labor; she has someone insert fine needles into specific locations of her body. She is most likely using:
A. acupressure.
B. acupuncture.
C. aromatherapy.
D. allostasis.

164. The Apgar Scale is a method used to assess the health of newborns. A score of three would indicate:
A. the newborn’s condition is good.
B. there may be some developmental difficulties.
C. an emergency, because the baby’s survival is in doubt.
D. the evaluator has not made a proper reading.

165. In assessing the health of newborns, the _____ identifies high-risk infants who need resuscitation.
A. Rogers-Randall Assessment
B. Brazelton Neonatal Behavioral Assessment Scale
C. Wechsler Infant Intelligence Scale
D. Apgar Scale

166. Which of the following is the Apgar Scale especially good at determining?
A. The severity of limb deformities of the newborn
B. The newborn’s susceptibility to common postnatal complications
C. The newborn’s ability to respond to stress of delivery
D. The newborn’s lactose tolerance

167. When Elijah was born, his mother could hear the nurses mention an Apgar score of nine. She was _____, because that score means _____.
A. worried; Elijah is underweight
B. worried; Elijah is in distress
C. happy; Elijah is in good condition after birth
D. happy; Elijah is full term

168. When Marcus was born, his mother could hear the nurses mention an Apgar score of five. She was _____, because that score means _____.
A. worried; Marcus is underweight
B. worried; Marcus is in distress
C. happy; Marcus is in good condition after birth
D. happy; Marcus is full term
169. Dakota was born after 40 weeks of gestation and weighed four pounds. Dakota would be considered:
A. preterm.
B. premature.
C. low birth weight.
D. very low birth weight.

170. Malorie was born during her mother’s 32nd week of pregnancy. Malorie would be termed a _____ baby.
A. preterm
B. premature
C. low-birth-weight
D. normal and average

171. Juan-Carlos was born full term but was underweight for his gestational age. He would be considered:
A. preterm.
B. premature.
C. normal.
D. small for date.

172. Sidra is distressed because her baby was born at 27 weeks. Her baby is considered to be a(n):
A. very preterm infant.
B. moderately preterm infant.
C. mildly preterm infant.
D. extremely preterm infant.

173. Approximately what percentage of low-birth-weight infants end up enrolled in special education programs?
A. 10%
B. 25%
C. 50%
D. 75%

174. Shannon’s son was born early and weighed 4.8 pounds. After considering her options, Shannon chooses to spend time with her son by holding him upright against her bare chest, while he is wearing only a diaper, to maximize skin-to-skin contact. She is using:
A. kangaroo care.
B. koala care.
C. panda care.
D. cuddle care.

175. The formation of a connection, especially a physical one between parents and the newborn, is called:
A. bonding.
B. connecting.
C. conjoining.
D. basking.

176. Tyrell has decided that when she gives birth to her daughter at the hospital, she would like to have her daughter stay in her room most of the time. Even though she knows this _____ will not influence her daughter’s emotional development, Tyrell wants her daughter close by.
A. rooming-in arrangement
B. kangaroo care arrangement
C. family-style protocol
D. comfort-sharing protocol

177. The adjustment period that follows the birth of a child, usually about six weeks long, is called the:
A. postpartum period.
B. postdelivery phase.
C. prepartum period.
D. antepartum stage.

178. Mariah has given birth to a baby girl. Even one month after delivery, she is experiencing very strong feelings of sadness and anxiety. She is so morose that she is having trouble coping with daily tasks. Mariah is most likely suffering from:
A. posttraumatic stress disorder.
B. postpartum blues.
C. paranoid schizophrenia.
D. postpartum depression.

179. Recent studies suggest that depression during pregnancy, physical abuse, and a migrant status were all predictors of:
A. postpartum depression.
B. the baby blues.
C. increased psychological well-being.
D. increased self-efficacy.

180. All of the following are ways to effectively treat postpartum depression EXCEPT:
A. exercise.
B. antidepressant drugs.
C. cognitive therapy.
D. withdrawal of social support.

181. Behavior that promotes an organism’s survival in the natural habitat.

**Adaptive behavior**

182. A psychological perspective that emphasizes the importance of adaptation, reproduction, and “survival of the fittest” in shaping human behavior.

**Evolutionary psychology**

183. A complex molecule, with a double helix shape, that contains genetic information.

**DNA (deoxyribonucleic acid)**

184. Short segments of DNA that are located on the chromosomes, considered to be the basic units of hereditary information.

**Genes**

185. Cell division in the eggs and sperm. A cell duplicates its chromosomes and divides twice. This leads to the formation of four cells that contain only half of the genetic material of the parent cell.

**Meiosis**

186. Xiomarra is tall with dark, curly hair and brown eyes. She is outgoing and friendly. These observable characteristics are given this general label.

**Phenotype**
187. A chromosomal abnormality that is characterized by an extra copy of chromosome 21. A person with this disorder typically has a round face, a flattened skull, an extra fold of skin over the eyelids, a protruding tongue, short limbs, and retardation of motor and mental abilities.

**Down syndrome**

188. The period of prenatal development that occurs two to eight weeks after conception. During this time, the rate of cell differentiation intensifies, support systems for the cells form, and organs appear.

**Embryonic period**

189. This process, which takes place at approximately 6 to 24 weeks after conception, involves cells moving from their point of origin to their appropriate locations and creating the different levels, structures, and regions of the brain.

**Neuronal migration**

190. A prenatal medical procedure in which a sample of amniotic fluid is withdrawn by syringe and tested for chromosomal or metabolic disorders.

**Amniocentesis**

191. Any agent that can potentially cause a birth defect or negatively alter cognitive and behaviors outcomes.

**Teratogen**

192. Describe one of the criticisms of evolutionary perspective in psychology.

It is “one-sided evolutionism,” which sees social behavior as only and directly the product of evolved biological characteristics. It does not directly dictate human behavior. It is difficult to test or refute because the time scale is beyond what we can study.

193. Describe the relationship between chromosomes, DNA, and genes.

The nucleus of a human cell contains chromosomes, which are made up of threads of DNA. DNA is made of units of genes.
194. What is the difference between a gamete and a zygote?

Gametes are the eggs and sperm forming through meiosis containing half the genetic material. Zygotes are fertilized cells, created by an egg and sperm fusing, with full genetic material.

195. Using the example of a child who inherited the genes to be very tall, explain how a genotype may be expressed in a variety of phenotypes.

Even though the genetic code is there to be tall, good nutrition will increase the chances of that happening (one phenotype expression) and poor nutrition will decrease the chance that the child will be as tall as his or her potential (another phenotype expression).

196. Explain why males are more susceptible to X-linked inheritance.

Males have only one X chromosome so any damage will show itself. Females have two X chromosomes, so if one is damaged then the other can serve as a backup.

197. Describe a major difference between hemophilia and sickle-cell anemia.

Hemophilia is delayed blood clotting that causes internal and external bleeding, whereas sickle-cell anemia is caused by misshaped red blood cells that in turn limit the body's oxygen supply.

198. What are the three ways that heredity and environment are correlated, as described by behavior geneticist Sandra Scarr, and what is the role of the child in each?

In passive genotype–environment correlations, the child follows his or her parents; in evocative genotype–environment correlations, the child’s characteristics bring reactions from the environment; and in active (niche-picking) genotype–environment correlations, the child is active in seeking compatible and stimulating environments.

199. Assume that in the case study of the Jim and Jim twins it is found that their similar development trajectories were a result of similar temperament and interests, which caused them to seek out similar environments that were compatible and stimulating to them. Which heredity–environment correlation is reflected in this scenario?

This would reflect the active (niche-picking) genotype–environment correlation that occurs when children seek out environments that they find compatible and stimulating.
200. Define gene × environment (G × E) interaction. Give an example of a study (either your own or one from the book) that could illustrate the interaction between genes and the environment.

Gene × environment (G × E) interaction refers to the interaction of a specific measured variation in the DNA and a specific measured aspect of the environment. In a study, adults who experienced parental loss as young children were more likely to have unresolved attachment issues as adults only when they had the short version of the 5-HTTLPR gene (Caspers et al., 2009). The long version of the serotonin transporter gene apparently provided some protection and ability to cope better with parental loss.

201. List and describe the three layers of cells that form the embryo.

The innermost layer is the endoderm, which will develop into the digestive and respiratory systems. The middle layer is the mesoderm, which will become the circulatory system, bones, muscles, excretory system, and reproductive system. The outermost layer is the ectoderm, which will become the nervous system, sensory receptors, and skin parts.

202. Describe how the three prenatal periods are different from trimesters.

The germinal and embryonic periods occur in the first trimester. The fetal period begins toward the end of the first trimester and continues through the second and third trimesters.

203. Imagine that you are a nurse practitioner explaining to a patient what a triple screen is for, and her screening was abnormal. Explain to her what the next steps are.

The triple screen is a maternal blood screening test for birth defects. Your abnormal results mean we need to do a few more tests. Next we will do an ultrasound examination. If that doesn’t explain the abnormal results, then we will conduct an amniocentesis.

204. Give examples of how the causes of infertility can originate with either the man or the woman.

The woman may not be ovulating, she may be producing abnormal ova, her fallopian tubes may be blocked, or she may have a condition that prevents implantation of the embryo into the uterus. The man may produce too few sperm, the sperm may lack motility, or he may have a blocked passageway.

205. Define and give an example of a teratogen.
A teratogen is any agent that can potentially cause a birth defect or negatively alter cognitive and behavioral outcomes. Teratogens include drugs, incompatible blood types, environmental pollutants, infectious diseases, nutritional deficiencies, maternal stress, and advanced maternal and paternal age.

206. Describe the effect of alcohol on pregnancy.

Heavy drinking by pregnant women can be devastating to their offspring. Fetal alcohol spectrum disorders (FASD) are a cluster of abnormalities and problems that appear in the offspring of mothers who drink alcohol heavily during pregnancy. The abnormalities include facial deformities and defective limbs, face, and heart. Most children with FASD have learning problems and many are below average in intelligence, with some that are mentally retarded.

207. Pretend that you are a nurse practitioner, discussing the benefits of exercise with a young woman who is just beginning her pregnancy. Describe at least three of the benefits you would offer her.

Exercise prevents constipation, conditions the body, reduces excessive weight gain, prompts a more positive mental state, and reduces depression.

208. Describe the characteristics of the CenteringPregnancy program, designed to improve prenatal care for pregnant women.

This program is relationship centered and provides prenatal care in a group setting. It replaces 15-minute physician visits with 90-minute peer group support sessions and self-examination led by a physician or certified nurse-midwife. Groups of up to 10 women (and often their partners) meet regularly beginning at 12 to 16 weeks of pregnancy. Its goal is to empower women to play an active role in experiencing a positive pregnancy.

209. Janelle is considering hiring a doula to help with childbirth. What is a doula and how are they different from midwives?

Doula is a Greek word that means “a woman who helps.” A doula is a caregiver who provides continuous physical, emotional, and educational support for the mother before, during, and after childbirth. Doulas remain with the parents throughout labor, assessing and responding to the mother’s needs. In the United States, most doulas work as independent providers hired by the expectant parents. Doulas typically function as part of a “birthing team,” serving as an adjunct to the midwife or the hospital’s obstetric staff. Doulas may serve as an assistant to the professional midwife. A doula will spend more time with the mother than a midwife will during the time before and after the birth.

210. Bronwyn is interested in using nonmedical techniques to assist her with dealing with pain during childbirth. Based on the text and class discussion, what are the two best options available to her, and why?

Some new nonmedicated techniques used in childbirth to reduce stress and pain are waterbirth, massage, acupuncture, hypnosis, and music therapy.
211. In 2013, records showed a 34% increase in the number of low-birth-weight and preterm infants since the 1980s. What are some of the factors leading to this change?

Factors include the increasing number of births to women 35 years old and older, increasing rates of multiple births, increased management of maternal and fetal conditions, increased substance abuse, and increased stress.