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MULTIPLE CHOICE

1) Developmental science is a field of study devoted to
   A) proving contemporary theories of development.
   B) understanding abnormal development in children and adolescents.
   C) understanding constancy and change throughout the lifespan.
   D) identifying genetic contributions to disease and illness.
Answer: C
Page Ref: 3
Skill: Conceptual
Objective: 1.1

2) The field of developmental science is considered to be ___________ because investigators often are interested in the practical implications of their research.
   A) biased
   B) applied
   C) theoretical
   D) interdisciplinary
Answer: B
Page Ref: 3
Skill: Factual
Objective: 1.1

3) Developmental science is ___________ because it has grown through the combined efforts of people from many fields of study.
   A) theoretical
   B) empirical
   C) applied
   D) interdisciplinary
Answer: D
Page Ref: 3
Skill: Factual
Objective: 1.1

4) Theories are vital tools for developmental researchers because they
   A) ensure proper use of research procedures.
   B) illustrate the ultimate truth regarding human behavior.
   C) provide organizing frameworks for our observations of people.
   D) do not require scientific verification.
Answer: C
Page Ref: 4
Skill: Conceptual
Objective: 1.2
5) The ___________ view of development holds that infants and preschoolers respond to the world in much the same way as adults do.
   A) discontinuous 
   B) nature 
   C) continuous 
   D) nurture 
   Answer: C  
   Page Ref: 4  
   Skill: Factual  
   Objective: 1.2 

6) Within the ________________ view of development, new ways of understanding and responding to the world emerge at specific times.
   A) discontinuous 
   B) nature 
   C) continuous 
   D) nurture 
   Answer: A  
   Page Ref: 4  
   Skill: Factual  
   Objective: 1.2 

7) Dr. Kostel believes that development takes place in stages. This belief is consistent with the _________ perspective.
   A) nurture 
   B) continuous 
   C) discontinuous 
   D) nature 
   Answer: C  
   Page Ref: 4  
   Skill: Applied  
   Objective: 1.2 

8) Kim is interested in comparing the language development of shy versus outgoing preschoolers. Kim is most likely interested in _____________ that shape development.
   A) genetic factors 
   B) the contexts 
   C) therapeutic techniques 
   D) historical factors 
   Answer: B  
   Page Ref: 4  
   Skill: Applied  
   Objective: 1.2 

9) Jackson, a professional baseball player, is convinced that his two sons will both be outstanding athletes. Jackson probably believes that athletic ability is mostly determined by
   A) nurture. 
   B) stages. 
   C) early experiences. 
   D) nature. 
   Answer: D  
   Page Ref: 5  
   Skill: Applied  
   Objective: 1.2
10) Although Justin spent his first 18 months in an orphanage, his adoptive mother believes that sensitive caregiving will help Justin overcome his early experiences. Justin’s mother emphasizes the role of ____________ in development.
   A) nurture
   B) stages
   C) stability
   D) nature
   Answer: A
   Page Ref: 5
   Skill: Applied
   Objective: 1.2

11) Theorists who point to early experiences as establishing a lifelong pattern of behavior emphasize
   A) stages.
   B) discontinuity.
   C) stability.
   D) continuity.
   Answer: C
   Page Ref: 5
   Skill: Factual
   Objective: 1.2

12) Theorists who believe that change is possible and even likely if new experiences support it emphasize
   A) stages.
   B) plasticity.
   C) nature.
   D) stability.
   Answer: B
   Page Ref: 5
   Skill: Factual
   Objective: 1.2

13) The increase in the number of healthier, more active older adults suggests that human development is a
   A) controversial area of research.
   B) unidirectional system.
   C) dynamic system.
   D) biological, rather than environmental, science.
   Answer: C
   Page Ref: 5
   Skill: Conceptual
   Objective: 1.3

14) Max, age 65, learned to play the piano at a local senior center. Max demonstrates that
   A) aging is an eventual “shipwreck.”
   B) learning follows a predictable timetable.
   C) development is plastic at all ages.
   D) musical talent peaks in late adulthood.
   Answer: C
   Page Ref: 5
   Skill: Applied
   Objective: 1.3
15) In the lifespan perspective, every age period of human development
   A) has its own agenda and its unique demands and opportunities that yield some similarities in development across many individuals.
   B) is met with a significant crisis that must be overcome prior to moving on to the next age period.
   C) is unidirectional and marked by improved performance.
   D) has a greater impact on the life course than the previous age period.
   Answer: A
   Page Ref: 5–6
   Skill: Conceptual
   Objective: 1.3

16) The lifespan perspective on development assumes that
   A) development is static and stable.
   B) events that occur during infancy and early childhood have the strongest impact on the life course.
   C) development is affected by a blend of biological, psychological, and social forces.
   D) individual development is continuous, rather than discontinuous.
   Answer: C
   Page Ref: 6
   Skill: Conceptual
   Objective: 1.3

17) Which of the following is an assumption of the lifespan perspective?
   A) Development is largely the result of heredity.
   B) Development is primarily characterized by declines in functioning.
   C) Development is a joint expression of growth and decline.
   D) Plasticity is limited to early childhood.
   Answer: C
   Page Ref: 6
   Skill: Conceptual
   Objective: 1.3

18) Which of the following is an example of an age-graded influence?
   A) Paul started babysitting at age 13.
   B) Frank got his driver’s license at age 16.
   C) Martina got married at age 34.
   D) Jesse learned to use a computer at age 21.
   Answer: B
   Page Ref: 7
   Skill: Applied
   Objective: 1.3

19) Although Betty grew up in a rundown neighborhood, had divorced parents, and rarely saw her father, she is a successful, happy, and healthy adult. Betty’s ability to adapt effectively in the face of threats to development is known as
   A) assimilation.
   B) resilience.
   C) age-graded development.
   D) multidimensional development.
   Answer: B
   Page Ref: 8 Box: B&E: Resilience
   Skill: Applied
   Objective: 1.3
20) Which of the following is a personal characteristic that could offer protection from the damaging effects of early stressful life events?
   A) musical talent
   B) hyperactivity
   C) physical attractiveness
   D) early puberty
   Answer: A
   Page Ref: 8 Box: B&E: Resilience
   Skill: Conceptual
   Objective: 1.3.

21) Research on resilience shows that
   A) heredity is more powerful than the environment in protecting children from the negative effects of stressful life events.
   B) the environment is more powerful than heredity in protecting children from the negative effects of stressful life events.
   C) interventions must attend to both the person and the environment to strengthen a child’s capacity while also reducing hazardous experiences.
   D) plasticity is limited to infancy and early childhood.
   Answer: C
   Page Ref: 8 Box: B&E: Resilience
   Skill: Conceptual
   Objective: 1.3.

22) History-graded influences explain why ___________ tend to be alike in ways that set them apart from people born at other times.
   A) siblings
   B) coworkers
   C) cohorts
   D) friends
   Answer: C
   Page Ref: 9
   Skill: Factual
   Objective: 1.3

23) Which of the following is an example of a nonnormative influence?
   A) Steve reached puberty at age 14.
   B) Melina was born during the baby boom.
   C) Madison learned to talk at age 2.
   D) Patty learned to speak Spanish and French in college.
   Answer: D
   Page Ref: 9
   Skill: Applied
   Objective: 1.3

24) The increasing role of ___________ in the life course adds to the fluid nature of lifespan development.
   A) age-graded influences
   B) nonnormative events
   C) history-graded influences
   D) stagewise transformations
   Answer: B
   Page Ref: 9
   Skill: Factual
   Objective: 1.3
25) As a generation, baby boomers are
   A) healthier, but less educated, than the previous generation.
   B) more educated and less self-focused than the previous generation.
   C) healthier, better educated, and more self-focused than the previous generation.
   D) more self-focused, but financially worse off, than the previous generation.
   Answer: C
   Page Ref: 10 Box: LV: The Baby Boomers Reshape the Life Course
   Skill: Conceptual
   Objective: 1.3

26) Research on the baby boomers showed that starting in the mid-sixties,
   A) marriage rates declined, age of first marriage rose, and divorce rates increased.
   B) marriage rates increased, age of first marriage declined, and divorce rates stabilized.
   C) fewer young people entered college in favor of marriage and parenthood.
   D) young adults experienced higher rates of unemployment and financial insecurity than in previous generations.
   Answer: A
   Page Ref: 10 Box: LV: The Baby Boomers Reshape the Life Course
   Skill: Conceptual
   Objective: 1.3

27) Today, __________ are the largest generation ever to enter middle age.
   A) emerging adults
   B) African-American adults
   C) the baby boomers
   D) college educated women
   Answer: C
   Page Ref: 10 Box: LV: The Baby Boomers Reshape the Life Course
   Skill: Factual
   Objective: 1.3

28) Charles Darwin’s theory of evolution emphasized __________ and ____________.
   A) the normative approach; survival of the fittest
   B) noble savages; physical maturation
   C) natural selection; survival of the fittest
   D) tabula rasa; natural selection
   Answer: C
   Page Ref: 11
   Skill: Conceptual
   Objective: 1.4

29) Charles Darwin’s theories led other researchers to study all aspects of children’s behavior and, therefore, Darwin is considered the forefather of
   A) psychoanalysis.
   B) the mental testing movement.
   C) psychosocial theory.
   D) scientific child study.
   Answer: D
   Page Ref: 11
   Skill: Factual
   Objective: 1.4
30) G. Stanley Hall regarded development as a ___________ process.
   A) maturational
   B) nonnormative
   C) psychosocial
   D) social learning
   Answer: A
   Page Ref: 11
   Skill: Factual
   Objective: 1.4

31) G. Stanley Hall and his student, Arnold Gesell,
   A) discovered that prenatal growth is strikingly similar in many species.
   B) launched the normative approach.
   C) constructed the first standardized intelligence test.
   D) were the forefathers of psychoanalytic theory.
   Answer: B
   Page Ref: 11
   Skill: Conceptual
   Objective: 1.4

32) ___________ was among the first to make knowledge about child development meaningful to parents by writing child-rearing books.
   A) G. Stanley Hall
   B) Charles Darwin
   C) Arnold Gesell
   D) Alfred Binet
   Answer: C
   Page Ref: 11–12
   Skill: Factual
   Objective: 1.4

33) Alfred Binet and Theodore Simon’s intelligence test was originally constructed to
   A) measure individual differences in IQ.
   B) document age-related improvements in children’s intellectual functioning.
   C) identify children with learning problems who needed to be placed in special classes.
   D) compare the scores of people who varied in gender, ethnicity, and birth order.
   Answer: C
   Page Ref: 11–12
   Skill: Conceptual
   Objective: 1.4

34) According to Sigmund Freud, the
   A) ego develops through interactions with parents.
   B) superego is the conscious, rational part of personality.
   C) ego is the largest portion of the mind.
   D) id is the source of basic biological needs and desires.
   Answer: D
   Page Ref: 12
   Skill: Conceptual
   Objective: 1.5
35) In contrast to Sigmund Freud, Erik Erikson
   A) viewed children as taking a more active role in their own development.
   B) pointed out that normal development must be understood in relation to each culture’s life situation.
   C) minimized the role of culture in individual development.
   D) primarily focused on the importance of early life experiences.
   Answer: B
   Page Ref: 13
   Skill: Conceptual
   Objective: 1.5

36) Behaviorism focuses on
   A) unconscious impulses and drives.
   B) stimuli and responses.
   C) natural selection and survival of the fittest.
   D) clinical case studies.
   Answer: B
   Page Ref: 13
   Skill: Conceptual
   Objective: 1.5

37) In classical conditioning,
   A) a neutral stimulus is paired with another stimulus that produces a reflexive response.
   B) an innate reflex is extinguished.
   C) unconscious impulses and drives support healthy development.
   D) a reflexive response is paired with a new stimulus that produces a nonreflexive response.
   Answer: A
   Page Ref: 13–14
   Skill: Conceptual
   Objective: 1.5

38) Baby Max begins to cry as soon as he sees his mother pick up her car keys. Max probably does this because he learned to associate the car keys with his mother leaving. This example demonstrates
   A) modeling.
   B) operant conditioning.
   C) observational learning.
   D) classical conditioning.
   Answer: D
   Page Ref: 13–14
   Skill: Applied
   Objective: 1.5

39) In a historic experiment with 11-month-old Albert, John Watson demonstrated that
   A) children cannot be conditioned to fear a formerly neutral stimulus.
   B) infants as young as a few months old will repeat a behavior to obtain a desirable reward.
   C) children can be conditioned to fear a formerly neutral stimulus.
   D) children have an innate, inborn fear of rats.
   Answer: C
   Page Ref: 14
   Skill: Conceptual
   Objective: 1.5
40) According to _______ theory, the frequency of a behavior can be increased by following it with a wide variety of reinforcers.
   A) classical conditioning
   B) observational learning
   C) operant conditioning
   D) psychoanalytic
   Answer: C
   Page Ref: 14
   Skill: Factual
   Objective: 1.5

41) Garrett hits a playmate in the same way that he has been punished at home. This is an example of
   A) behavior modification.
   B) classical conditioning.
   C) operant conditioning.
   D) modeling.
   Answer: D
   Page Ref: 14
   Skill: Applied
   Objective: 1.5

42) According to ___________ theory, children learn primarily through modeling.
   A) reinforcement
   B) operant conditioning
   C) social learning
   D) classical conditioning
   Answer: C
   Page Ref: 14–15
   Skill: Factual
   Objective: 1.5

43) According to social learning theory, as children grow older they
   A) become more selective in what they imitate.
   B) become less selective in what they imitate.
   C) imitate more than they model.
   D) respond more favorably to punishment than reinforcement.
   Answer: A
   Page Ref: 15
   Skill: Conceptual
   Objective: 1.5

44) Behavior modification eliminates undesirable behaviors by
   A) exposing children to group therapy.
   B) having patients talk freely about painful childhood events.
   C) improving children’s social settings, such as school and home.
   D) combining conditioning and modeling.
   Answer: D
   Page Ref: 15
   Skill: Conceptual
   Objective: 1.5
45) Albert Bandura is unique among behaviorists because he
   A) combined psychoanalytic principles with operant conditioning theory.
   B) emphasized cognition and granted people an active role in their own learning.
   C) emphasized the role of the unconscious on people’s learning.
   D) emphasized the importance of early child-rearing experiences.
   Answer: B
   Page Ref: 15
   Skill: Conceptual
   Objective: 1.5

46) According to Jean Piaget, __________ is the balance between internal structures and information that children
   encounter in their everyday worlds.
   A) modeling
   B) maturation
   C) cognition
   D) equilibrium
   Answer: D
   Page Ref: 15
   Skill: Factual
   Objective: 1.5

47) Research on Piaget’s cognitive-developmental theory indicates that
   A) he overestimated the competencies of infants and young children.
   B) he overemphasized the role of social and cultural influences on development.
   C) discovery learning facilitates learning better than adult teaching.
   D) children’s performances on Piagetian tasks can be improved with training.
   Answer: D
   Page Ref: 16
   Skill: Conceptual
   Objective: 1.5

48) The information-processing approach views the mind as a
   A) symbol-manipulating system through which information flows.
   B) socially mediated process.
   C) collection of stimuli and responses.
   D) system of genetically programmed behaviors.
   Answer: A
   Page Ref: 17
   Skill: Factual
   Objective: 1.6

49) Lillian uses flowcharts to map the precise steps individuals use to solve problems and complete tasks. Lillian is
    a(n)__________ theorist.
    A) psychoanalytic
    B) information-processing
    C) dynamic systems
    D) social learning
    Answer: B
    Page Ref: 17–18
    Skill: Applied
    Objective: 1.6
50) Which of the following questions would an information-processing theorist ask?
   A) How do unconscious drives contribute to personality development?
   B) How do cultural values shape development?
   C) Are declines in memory during old age evident on all types of tasks or only some?
   D) Why are some individuals more aggressive than others?
Answer: C
Page Ref: 17–18
Skill: Applied
Objective: 1.6

51) A major weakness of the information-processing perspective is that it
   A) overemphasizes nonlinear aspects of cognition, such as creativity and imagination.
   B) virtually ignores aspects of cognition that are not linear and logical.
   C) fails to use rigorous research methods.
   D) underestimates the individual’s contribution to his or her own development.
Answer: B
Page Ref: 18
Skill: Conceptual
Objective: 1.6

52) ______ brings together researchers from psychology, biology, neuroscience, and medicine to study the relationship
between changes in the brain and the developing person’s cognitive processing and behavior patterns.
   A) The information-processing approach
   B) Cognitive-development theory
   C) Developmental cognitive neuroscience
   D) Behaviorism
Answer: C
Page Ref: 18
Skill: Factual
Objective: 1.6

53) ______ is concerned with the adaptive value of behavior and its evolutionary history.
   A) Ethology
   B) Developmental cognitive theory
   C) Social learning theory
   D) Psychoanalytic theory
Answer: A
Page Ref: 18
Skill: Factual
Objective: 1.6

54) Dr. Marx believes that early childhood is a sensitive period for language development. Dr. Marx’s belief is consistent with
   A) social learning theory.
   B) Freud’s theory.
   C) ethology.
   D) Piaget’s theory.
Answer: C
Page Ref: 18
Skill: Applied
Objective: 1.6
55) A(n) ________ period is a time that is optimal for certain capacities to emerge.
   A) equilibration
   B) imprinting
   C) adaptive
   D) sensitive
   Answer: D
   Page Ref: 19
   Skill: Factual
   Objective: 1.6

56) John Bowlby argued that
   A) behaviors such as smiling, babbling, and crying are innate social signals that encourage parents to interact with their infants.
   B) infants become attached to their parents because parents are associated with the reduction of primary drives, such as hunger and thirst.
   C) parents and infants are both instinctively attached to each other.
   D) attachment patterns are difficult to study in humans.
   Answer: A
   Page Ref: 19
   Skill: Conceptual
   Objective: 1.6

57) Dr. Symington studies male-to-male aggression in animals and humans. Dr. Symington probably focuses on
   A) dynamic systems theory.
   B) developmental cognitive theory.
   C) sociocultural theory.
   D) evolutionary developmental theory.
   Answer: D
   Page Ref: 19
   Skill: Applied
   Objective: 1.6

58) Lev Vygotsky’s theory focuses on
   A) critical periods of human development.
   B) children’s capacity to shape their own development.
   C) how behavior patterns promote survival.
   D) how culture is transmitted to the next generation.
   Answer: D
   Page Ref: 19–20
   Skill: Conceptual
   Objective: 1.6

59) ________ theory views the child as developing within a complex system of relationships affected by multiple levels of the environment.
   A) Social learning
   B) Ethological
   C) Sociocultural
   D) Ecological systems
   Answer: D
   Page Ref: 20
   Skill: Factual
   Objective: 1.6
60) Because a child’s biologically influenced dispositions join with environmental forces to mold development, Urie Bronfenbrenner characterized his perspective as a(n) ______________ model.
   A) sociocultural
   B) stagewise
   C) bioecological
   D) evolutionary
   Answer: C
   Page Ref: 20
   Skill: Factual
   Objective: 1.6

61) Bronfenbrenner’s macrosystem consists of
   A) activities and interaction patterns in the individual’s immediate surroundings.
   B) third parties that affect the quality of the parent–child relationship.
   C) cultural values, laws, customs, and resources.
   D) social settings that do not contain the developing person but nevertheless affect experiences.
   Answer: C
   Page Ref: 21
   Skill: Conceptual
   Objective: 1.6

62) Toby moved with his family just before he entered grade 4. In ecological systems theory, the move represents a change in Toby’s
   A) microsystem.
   B) mesosystem.
   C) exosystem.
   D) chronosystem.
   Answer: D
   Page Ref: 21
   Skill: Applied
   Objective: 1.6

63) Piaget’s cognitive-developmental theory, information processing, and Vygotsky’s sociocultural theory all stress
   A) nature over nurture.
   B) changes in thinking.
   C) unconscious motives and drives.
   D) the effects of punishment and reinforcement on behavior.
   Answer: B
   Page Ref: 21
   Skill: Conceptual
   Objective: 1.7

64) Dr. George predicted that positive reinforcement would increase prosocial behavior in preschoolers. Dr. George’s prediction is an example of a
   A) theory.
   B) research question.
   C) hypothesis.
   D) research design.
   Answer: C
   Page Ref: 22
   Skill: Applied
   Objective: 1.8
65) Dr. Wiren observes children’s responses to bullying by watching them play in a park. This is an example of a(n)
   A) ethnographic study.
   B) naturalistic observation.
   C) structured observation.
   D) clinical interview.
Answer: B
Page Ref: 23
Skill: Applied
Objective: 1.8

66) A major limitation of systematic observation is that it
   A) provides little information on how participants actually behave.
   B) underestimates the capacities of individuals who have difficulty putting their thoughts into words.
   C) tells investigators little about the reasoning behind responses and behaviors.
   D) ignores participants with poor memories, who may have trouble recalling exactly what happened.
Answer: C
Page Ref: 23–24
Skill: Conceptual
Objective: 1.8

67) Jessica asked each of 21 children in a kindergarten classroom to explain where rain comes from. She asked the same set of follow-up questions to each participant. This is an example of a
   A) field experiment.
   B) naturalistic observation.
   C) structured interview.
   D) structured observation.
Answer: C
Page Ref: 24
Skill: Applied
Objective: 1.8

68) A __________ interview is more efficient than a _________ interview because researchers can obtain written responses from an entire group simultaneously.
   A) clinical; naturalistic
   B) structured; naturalistic
   C) clinical; structured
   D) structured; clinical
Answer: D
Page Ref: 24–25
Skill: Conceptual
Objective: 1.8

69) __________ interviews do not yield the same depth of information as _________ interviews.
   A) Clinical; naturalistic
   B) Clinical; structured
   C) Structured; clinical
   D) Structured; naturalistic
Answer: C
Page Ref: 24–25
Skill: Conceptual
Objective: 1.8
70) One major limitation of the clinical, or case study, method is
  A) that researchers’ theoretical preferences may bias their observations and interpretations.
  B) that it must be conducted with large groups of people at the same time.
  C) it provides little information on how children and adults actually behave.
  D) it provides little information about the reasoning behind responses and behaviors.
Answer: A
Page Ref: 25
Skill: Conceptual
Objective: 1.8

71) The __________ method yields richly detailed case narratives that offer valuable insights into the many factors influencing development.
  A) naturalistic observation
  B) clinical
  C) ethnographic
  D) structured observation
Answer: B
Page Ref: 25
Skill: Conceptual
Objective: 1.8

72) Ethnographic research is directed toward understanding a culture through ___________ observation.
  A) naturalistic
  B) participant
  C) systematic
  D) structured
Answer: B
Page Ref: 25
Skill: Conceptual
Objective: 1.8

73) The ethnographic method assumes that __________ will allow researchers to understand beliefs and behaviors.
  A) entering into close contact with a social group
  B) bringing together a wide range of information on one person
  C) setting up a structured laboratory experiment
  D) using a flexible, conversational interviewing style
Answer: A
Page Ref: 25
Skill: Conceptual
Objective: 1.8

74) Jade spent two years in a Mexican-American community studying communication between parents and children. Jade is using the __________ research method.
  A) naturalistic observation
  B) ethnographic
  C) self-report
  D) structured observation
Answer: B
Page Ref: 25
Skill: Applied
Objective: 1.8
75) One limitation of the ethnographic method is
   A) investigators’ cultural values sometimes lead them to misinterpret what they see.
   B) it provides little information on how children and adults actually behave.
   C) it relies on unobtrusive techniques, such as surveillance cameras and one-way mirrors.
   D) it provides little information about the reasoning behind participants’ responses.
   Answer: A
   Page Ref: 26
   Skill: Conceptual
   Objective: 1.8

76) Compared to their agemates, adolescents from immigrant families are
   A) more likely to commit delinquent and violent acts.
   B) more likely to use drugs or alcohol.
   C) more likely to have early sex.
   D) less likely to commit delinquent or violent acts.
   Answer: D
   Page Ref: 26 Box CI: Immigrant Youths
   Skill: Conceptual
   Objective: 1.9

77) Which of the following is supported by research on immigrant children in the United States?
   A) Recently arrived high school immigrants report lower self-esteem than those who came at younger ages.
   B) Compared to their agemates with native-born parents, adolescents from immigrant families are more likely to miss school because of illness.
   C) Adolescents from immigrant families endorse their parents’ value of education more strongly than agemates with native-born parents.
   D) Adolescents from immigrant families are more likely to be obese than their agemates with native-born parents.
   Answer: C
   Page Ref: 26 Box CI: Immigrant Youths
   Skill: Conceptual
   Objective: 1.9

78) Professor Pedagogy's research shows that participation in extracurricular activities is correlated with grades in school. Based on this study's findings, what can Professor Pedagogy conclude?
   A) Participation in extracurricular activities causes grade differences.
   B) Grades cause differences in participation in extracurricular activities.
   C) Participation in extracurricular activities is related to grades.
   D) A third variable, such as intelligence, is causing both participation in extracurricular activities and grade differences.
   Answer: C
   Page Ref: 27
   Skill: Applied
   Objective: 1.9

79) A(n) _______________ is a number that describes how two measures are associated with each other.
   A) correlation coefficient
   B) independent variable
   C) dependent variable
   D) random assignment
   Answer: A
   Page Ref: 27
   Skill: Factual
   Objective: 1.9
80) Dr. Anodyne found a correlation of +.49 between illegal drug use and levels of adolescent delinquency. This correlation is
   A) moderate and positive.
   B) low and positive.
   C) high and negative.
   D) low and negative.
Answer: A
Page Ref: 27
Skill: Applied
Objective: 1.9

81) Two main types of designs used in all research on human behavior are _____________ and ____________.
   A) observational; experimental
   B) correlational; experimental
   C) observational; correlational
   D) variable; observational
Answer: B
Page Ref: 27–28
Skill: Factual
Objective: 1.9

82) A(n) ______________ design permits inferences about cause and effect.
   A) structured
   B) observational
   C) experimental
   D) correlational
Answer: C
Page Ref: 28
Skill: Factual
Objective: 1.9

83) The ______________ variable is the one the investigator expects to cause changes in another variable.
   A) correlational
   B) independent
   C) dependent
   D) coefficient
Answer: B
Page Ref: 28
Skill: Factual
Objective: 1.9

84) A dependent variable is the
   A) one the investigator expects to be influenced by the independent variable.
   B) number that describes how two measures are associated with each other.
   C) number that shows the strength of the relationship between two measures.
   D) one the investigator randomly assigns to represent participant characteristics.
Answer: A
Page Ref: 28
Skill: Factual
Objective: 1.9
85) In an experiment on the effects of music versus acting lessons on intelligence, the independent variable would be
   A) the type of lessons (music versus acting).
   B) a measure of intelligence.
   C) the type of music lessons.
   D) the frequency of the acting lessons.
   Answer: A
   Page Ref: 28
   Skill: Applied
   Objective: 1.9

86) Cause-and-effect inferences can be made in an experimental design because
   A) the researcher manipulates both the independent and dependent variables.
   B) the researcher controls the dependent variable throughout the experiment.
   C) the researcher directly controls or manipulates changes in the independent variable.
   D) participants are systematically assigned to experimental conditions.
   Answer: C
   Page Ref: 28
   Skill: Conceptual
   Objective: 1.9

87) In an experiment examining whether phonics instruction in preschool increases a child’s reading level in third grade, the
   dependent variable would be the
   A) type of phonics instruction.
   B) number of children in the experiment.
   C) child’s reading level in third grade.
   D) frequency of phonics instruction.
   Answer: C
   Page Ref: 28
   Skill: Applied
   Objective: 1.9

88) Random assignment
   A) can compromise an experimental design by exposing the researcher’s bias.
   B) assures that participants are assigned to experimental conditions in an unbiased manner.
   C) is impossible to use in experimental designs.
   D) is a control technique that is primarily used in correlational studies.
   Answer: B
   Page Ref: 28
   Skill: Conceptual
   Objective: 1.9

89) Professor Martinez wants to know if children who receive one-on-one instruction at school feel more self-confident than
   children who receive group instruction. To identify a causal relationship between type of instruction and self-confidence,
   Professor Martinez should
   A) compare the number of hours teachers spend on group instruction with the number of hours they spend on
      individualized instruction.
   B) observe a teacher’s one-on-one interactions with several children in a laboratory school.
   C) select a group of children who score high on the self-confidence measure and a second group who score low on the
      self-confidence measure and expose them to both types of instruction.
   D) randomly assign half of the participants to group instruction and the other half to one-on-one instruction and
      compare measures of self-confidence for each group.
   Answer: D
   Page Ref: 28
   Skill: Applied
   Objective: 1.9
90) In ________ experiments, investigators capitalize on opportunities to assign participants randomly to treatment conditions in natural settings.
   A) field  
   B) natural  
   C) structured  
   D) laboratory  
   Answer: A
   Page Ref: 28  
   Skill: Conceptual  
   Objective: 1.9

91) In a __________ design, investigators study the same group of participants repeatedly at different ages.
   A) sequential  
   B) correlational  
   C) cross-sectional  
   D) longitudinal  
   Answer: D
   Page Ref: 28  
   Skill: Factual  
   Objective: 1.9

92) A major strength of the longitudinal design is that researchers can
   A) examine relationships between early and later behaviors.  
   B) collect a large amount of data in a short time span.  
   C) explore similarities among children of different cohorts.  
   D) study participants differing in age at the same point in time.  
   Answer: A
   Page Ref: 28  
   Skill: Conceptual  
   Objective: 1.10

93) To examine whether depression is stable or changes with age, Dr. Bleu followed a group of children from age 8 to age 40. This is an example of a __________ design.
   A) cross-sectional  
   B) sequential  
   C) correlational  
   D) longitudinal  
   Answer: D
   Page Ref: 28  
   Skill: Applied  
   Objective: 1.10

94) Longitudinal research can identify common patterns as well as individual differences in behavior because the investigator
   A) studies groups of participants differing in age at the same point in time.  
   B) randomly assigns participants to treatment conditions.  
   C) tracks the performance of each person over time.  
   D) conducts quasi-experiments, comparing conditions that already exist.  
   Answer: C
   Page Ref: 28  
   Skill: Factual  
   Objective: 1.10
95) One limitation of longitudinal research is that participants’ performance may improve as a result of
   A) biased sampling.
   B) random assignment.
   C) practice effects.
   D) cohort effects.
   Answer: C
   Page Ref: 29
   Skill: Conceptual
   Objective: 1.10

96) In a longitudinal study, __________ effects occur when individuals born in the same time period are influenced by a
   particular set of historical and cultural conditions.
   A) practice
   B) historical
   C) cohort
   D) cultural
   Answer: C
   Page Ref: 29
   Skill: Factual
   Objective: 1.10

97) In a __________ design, the investigator studies groups of participants differing in age at the same point in time.
   A) cross-sectional
   B) longitudinal
   C) sequential
   D) correlational
   Answer: A
   Page Ref: 29–30
   Skill: Factual
   Objective: 1.10

98) Professor Gimbly wants to investigate how children of different ages characterize their friendships. Professor Gimbly
   should use a ______________ research design.
   A) cross-sectional
   B) sequential
   C) correlational
   D) longitudinal
   Answer: A
   Page Ref: 29–30
   Skill: Applied
   Objective: 1.10

99) The cross-sectional design is an efficient strategy for describing
   A) common patterns in development.
   B) individual differences in development.
   C) age-related trends.
   D) relationships between early and later events and behaviors.
   Answer: C
   Page Ref: 29–30
   Skill: Conceptual
   Objective: 1.10
100) A major disadvantage of cross-sectional research is that
   A) age-related changes cannot be examined.
   B) participants often drop out before the study is over.
   C) factors affecting individual development cannot be explored.
   D) practice effects often cause biased findings.
   Answer: C
   Page Ref: 30
   Skill: Conceptual
   Objective: 1.10

101) Like longitudinal research, cross-sectional studies can be threatened by
   A) practice effects.
   B) participant dropout.
   C) sequential timing.
   D) cohort effects.
   Answer: D
   Page Ref: 30
   Skill: Conceptual
   Objective: 1.10

102) To overcome some of the limitations of traditional developmental designs, investigators sometimes use
   A) longitudinal studies.
   B) correlational research.
   C) sequential designs.
   D) cross-sectional designs.
   Answer: C
   Page Ref: 30
   Skill: Conceptual
   Objective: 1.10

103) Research that combines ____________ and ______________ designs is increasingly common because it permits
   correlative and causal inferences.
   A) longitudinal; sequential
   B) experimental; developmental
   C) cross-sectional; developmental
   D) correlational; experimental
   Answer: B
   Page Ref: 30–31
   Skill: Conceptual
   Objective: 1.10

104) ________________ weigh the costs of the research to participants in terms of risks versus benefits.
   A) Informed consent boards
   B) The American Psychological Association
   C) Institutional review boards
   D) Research participant committees
   Answer: C
   Page Ref: 31–32
   Skill: Factual
   Objective: 1.11
105) The ethical principle of ______________ requires special interpretation when participants cannot fully appreciate the research goals and activities.
   A) researchers’ rights
   B) informed consent
   C) beneficial treatments
   D) protection from harm
Answer: B
Page Ref: 32
Skill: Conceptual
Objective: 1.11

106) In ____________, the investigator provides a full account and justification of the activities after the research session is over.
   A) debriefing
   B) beneficial treatments
   C) informed consent
   D) protection from harm
Answer: A
Page Ref: 33
Skill: Factual
Objective: 1.11

107) One limitation of debriefing is
   A) young children often lack the cognitive skills to understand the reasons for deceptive procedures.
   B) some individuals may agree to participate simply to engage in rewarding social interaction.
   C) the lack of availability of surrogate decision makers.
   D) children may be concerned that the information they provide will not be kept confidential.
Answer: A
Page Ref: 33
Skill: Conceptual
Objective: 1.11

108) Ethical standards permit deception in research studies if
   A) the participants are young enough that they would not understand the deception.
   B) the benefits to society justify the risks to the participants and special precautions are taken.
   C) researchers can observe participants from behind one-way mirrors.
   D) the participants give informed consent and the researchers never reveal the real purpose of the study.
Answer: B
Page Ref: 33
Skill: Conceptual
Objective: 1.11

ESSAY

109) Describe the lifespan perspective of development, and indicate its stance on the three basic issues of human development.
Answer: The lifespan perspective considers human development as lifelong, plastic, multidimensional, multidirectional, and influenced by multiple, interacting forces. It views development as both continuous gains and declines and discontinuous stagewise emergence of new skills. Development is influenced by multiple, interacting biological, psychological, and social forces, many of which vary from person to person, leading to diverse pathways of change. Development is affected by an intricate blend of heredity and environmental factors. Both early and later experiences are important. There is plasticity at all ages.
Page Ref: 5–9
110) Explain the age-old nature–nurture controversy and indicate the stance of psychoanalytic theory, behaviorism, and cognitive-developmental theory on this issue.

Answer: Nature includes inborn, biological, and hereditary information received from parents at the moment of conception. Nurture includes the complex forces of the physical and social environment that influence development before and after birth. All human development theories grant at least some role to both nature and nurture, but they vary in emphasis.

Psychoanalytic theory holds that both nature and nurture determine development as innate impulses are channeled and controlled through child-rearing experiences. Individual development is stable because early experiences set the course of later development.

Behaviorism assumes that development is determined primarily by nurture, but individual development is open to change because both early and later experiences are important.

Cognitive-developmental theory emphasizes both nature and nurture. Development occurs as the brain matures and children exercise their innate drive to discover reality in a generally stimulating environment. Development is open to change because both early and later experiences influence it.

Page Ref: 5, 12–17

111) Describe the contributions of Charles Darwin, G. Stanley Hall, Arnold Gesell, and Alfred Binet to the scientific study of human development.

Answer: Charles Darwin, a British naturalist, is considered the forefather of scientific child study. He constructed the famous theory of evolution, emphasizing two related principles: natural selection and survival of the fittest. Darwin’s emphasis on the adaptive value of physical characteristics and behavior found its way into important developmental theories. His efforts to chart parallels between child growth and human evolution prompted researchers to make careful observations of all aspects of children’s behavior.

G. Stanley Hall is generally regarded as the founder of the child study movement. Together with his student, Arnold Gesell, he regarded development as a maturational process that unfolds automatically. They launched the normative approach, in which measures of behavior are taken on large numbers of individuals, and age-related averages are computed to represent typical development. Gesell was among the first to author child-rearing advice books for parents.

Alfred Binet constructed the first successful intelligence test. The Stanford-Binet Intelligence Scale could successfully predict school achievement and sparked tremendous interest in individual differences in development.

Page Ref: 11–12

112) Describe social learning theory, noting the contributions of Albert Bandura.

Answer: Social learning theory built on the principles of behaviorism to offer direct and effective explanations of the development of social behavior. Albert Bandura, an American psychologist, emphasized modeling, also known as imitation or observational learning, as a powerful source of development. In his early work, Bandura found that diverse factors, such as reinforcement or punishment, affected children’s motivation to imitate. Today, Bandura’s theory stresses the importance of cognition, or thinking. In Bandura’s social-cognitive approach, children gradually become more selective in what they imitate. They develop personal standards for behavior and a sense of self-efficacy.

Page Ref: 14–15
113) Describe the similarities and differences between Piaget’s cognitive-developmental theory and Vygotsky’s sociocultural theory.

Answer: Piaget did not regard direct teaching by adults as important for cognitive development. Instead, he emphasized children’s active, independent efforts to make sense of their world. Vygotsky agreed with Piaget that children are active, constructive beings. But unlike Piaget, he emphasized the importance of social interactions, particularly the support that adults and more mature peers provide as children try new tasks. Piaget saw development as discontinuous and assumed that stages were universal. Vygotsky saw development as both continuous and discontinuous. He believed that children undergo certain stagewise changes, but he believed that language development and schooling lead to these changes. Vygotsky believed that as soon as children acquire language, their enhanced ability to communicate with others leads to continuous changes in thought and behavior that can vary greatly from culture to culture. Unlike Piaget, Vygotsky also emphasized that children in every culture develop unique strengths that are not present in other cultures because different cultures select and value different tasks for children’s learning.

Page Ref: 15–17, 19–20, 22

114) Explain the strengths and weaknesses of systematic observations, self-reports, the clinical method, and ethnography.

Answer: Systematic observations can be naturalistic or structured. In naturalistic observations, behavior is viewed in natural contexts. A strength is it reflects the participants’ everyday life. A weakness is researchers cannot control conditions under which participants are observed. Structured observations often take place in a laboratory, where conditions are the same for all participants. A strength is it grants each participant an equal opportunity to display the behavior of interest. A weakness is it may not yield observations typical of everyday life.

Self-reports can be given during clinical interviews, where the investigator obtains a complete account of the participants’ thoughts, or through structured interviews, where each participant is asked the same questions in the same way. Clinical interviews come as close as possible to the way participants think in everyday life. However, they may not result in accurate reporting, and flexible procedures make comparing individual responses difficult. Structured interviews permit comparisons of responses and efficient data collection. However, they do not yield the same depth of information as clinical interviews, and responses are still subject to inaccurate reporting.

The clinical, or case study, method provides a full picture of one individual’s psychological functioning, obtained by combining interviews, observations, and test scores. It gives rich, descriptive insights into factors that affect development. However, it may be biased by researchers’ theoretical preferences. Findings cannot be applied to individuals other than the participant.

In ethnography, researchers observe a culture or distinct social group by making extensive field notes. The researcher tries to capture the culture’s unique values and social processes. However, it may be biased by researchers’ values and theoretical preferences. Findings cannot be applied to individuals and settings other than the ones studied.

Page Ref: 23–25

115) Describe longitudinal, cross-sectional, and sequential designs. Cite the strengths and weaknesses of each.

Answer: In a longitudinal design, the investigator studies the same group of participants repeatedly at different ages. The strengths of this approach are that it permits study of common patterns and individual differences in development and relationships between early and later events and behaviors. The limitations of this design are that age-related changes may be distorted because of participant dropout, practice effects, and cohort effects.

In a cross-sectional design, the investigator studies groups of participants differing in age at one point in time. This approach is more efficient than the longitudinal design and is not plagued by such problems as participant dropout and practice effects. The weaknesses of this method are that it does not permit study of individual developmental trends, and age differences may be distorted because of cohort effects.

In a sequential design, the investigator conducts several similar cross-sectional or longitudinal studies (called sequences) at varying times. The strengths of this approach are that it permits both longitudinal and cross-sectional comparisons and reveals the existence of cohort effects. It also permits tracking of age-related changes more efficiently than the longitudinal design. This design may have the same problems as longitudinal and cross-sectional strategies, but the design itself helps identify difficulties.

Page Ref: 28–32
CHAPTER 2
BIOLOGICAL AND ENVIRONMENTAL FOUNDATIONS

MULTIPLE CHOICE

1) Directly observable characteristics, such as eye color and height, are called
   A) zygotes.
   B) phenotypes.
   C) chromosomes.
   D) genotypes.
   Answer: B
   Page Ref: 36
   Skill: Factual
   Objective: 2.1

2) Phenotypes depend in part on an individual’s
   A) cells.
   B) chromosomes.
   C) genotypes.
   D) DNA.
   Answer: C
   Page Ref: 36
   Skill: Factual
   Objective: 2.1

3) A genotype is a
   A) physical or behavioral characteristic, determined both by environmental and genetic factors.
   B) directly observable characteristic.
   C) rodlike structure in the cell nucleus that transmits genetic information.
   D) complex blend of genetic information that determines the species and influences unique characteristics.
   Answer: D
   Page Ref: 36
   Skill: Factual
   Objective: 2.1

4) Within every cell (except red blood cells) is a control center, or
   A) phenotype.
   B) nucleus.
   C) genotype.
   D) zygote.
   Answer: B
   Page Ref: 36
   Skill: Factual
   Objective: 2.1
5) Generally, human chromosomes come in _____ matching pairs.
   A) 18
   B) 21
   C) 23
   D) 26
   Answer: C
   Page Ref: 36
   Skill: Factual
   Objective: 2.1

6) Rodlike structures called ______________ store and transmit genetic information.
   A) phenotypes
   B) chromosomes
   C) genotypes
   D) genes
   Answer: B
   Page Ref: 36
   Skill: Factual
   Objective: 2.1

7) Research shows that __________ genes lie along the human chromosomes.
   A) 23 pairs of
   B) 2,000 to 2,500
   C) 20,000 to 25,000
   D) 200,000 to 250,000
   Answer: C
   Page Ref: 37
   Skill: Factual
   Objective: 2.1

8) A unique feature of DNA is that it can duplicate itself through a process called
   A) genotosis.
   B) meiosis.
   C) zygosis.
   D) mitosis.
   Answer: D
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.1

9) During mitosis,
   A) each new body cell contains unique genetic information.
   B) cells divide in half to form the fertilized ovum.
   C) the chromosomes copy themselves.
   D) each new body cell contains 23 chromosomes.
   Answer: C
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.1
10) The area surrounding the cell nucleus is called the
   A) zygote.
   B) cytoplasm.
   C) gamete.
   D) gene.
   Answer: B
   Page Ref: 37
   Skill: Factual
   Objective: 2.1

11) ___________ provide the biological foundation on which our characteristics are built.
   A) Proteins
   B) Genes
   C) Chromosomes
   D) Gametes
   Answer: A
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.1

12) The sperm and the ovum are sex cells, or
   A) autosomes.
   B) gametes.
   C) zygotes.
   D) dizygotes.
   Answer: B
   Page Ref: 37
   Skill: Factual
   Objective: 2.1

13) A gamete
    A) contains 46 chromosomes.
    B) is formed through mitosis.
    C) contains 23 chromosomes.
    D) is formed when the chromosomes copy themselves.
    Answer: C
    Page Ref: 37
    Skill: Conceptual
    Objective: 2.2

14) ___________ halves the number of chromosomes normally present in body cells.
    A) Mitosis
    B) The presence of a protein
    C) Cytoplasm
    D) Meiosis
    Answer: D
    Page Ref: 37
    Skill: Conceptual
    Objective: 2.2
15) ________increase(s) the chances that at least some members of a species will cope with ever-changing environments and survive.
   A) Autosomes
   B) Fraternal twinning
   C) Meiosis
   D) Gametes
   Answer: C
   Page Ref: 37
   Skill: Factual
   Objective: 2.2

16) The exchange of chromosome segments during meiosis results in
   A) severe mutations.
   B) incredible variability among siblings.
   C) higher rates of fraternal twins for women with X-linked disorders.
   D) the production of more female zygotes than male zygotes.
   Answer: B
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.2

17) The genetic variability produced by meiosis is
   A) rare.
   B) male dominant.
   C) adaptive.
   D) female dominant.
   Answer: C
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.2

18) In the male, ________sperm is/are produced when meiosis is complete.
   A) one
   B) two
   C) three
   D) four
   Answer: D
   Page Ref: 37
   Skill: Factual
   Objective: 2.2

19) In the female, meiosis results in
   A) just one ovum.
   B) two ova.
   C) three ova.
   D) four ova.
   Answer: A
   Page Ref: 37
   Skill: Factual
   Objective: 2.2
20) Research shows that a healthy
   A) male can father a child at any age after sexual maturity.
   B) male is born with all his sperm present in the testes.
   C) female produces ova throughout her childbearing years.
   D) female can bear a child at any age after sexual maturity.
   Answer: A
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.2

21) Of matching pairs of chromosomes, 22 of 23 are called __________ and one pair consists of ____________.
   A) gametes; sex chromosomes
   B) zygotes; XX chromosomes
   C) autosomes; sex chromosomes
   D) autosomes; YY chromosomes
   Answer: C
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.2

22) The sex of a baby is determined by whether
   A) the X and Y chromosomes separate into sperm cells or ovum.
   B) an X-bearing or a Y-bearing sperm fertilizes the ovum.
   C) the sperm fertilizes an X-bearing or a Y-bearing egg.
   D) the ovum is carrying an X chromosome or a Y chromosome.
   Answer: B
   Page Ref: 37
   Skill: Conceptual
   Objective: 2.2

23) Taylor’s 23rd pair of chromosomes is XY. Taylor
   A) is male.
   B) cannot be a fraternal twin.
   C) is female.
   D) cannot be an identical twin.
   Answer: A
   Page Ref: 37
   Skill: Applied
   Objective: 2.2

24) __________ are the most common type of multiple birth.
   A) Triplets
   B) Fraternal twins
   C) Identical twins
   D) Quadruplets
   Answer: B
   Page Ref: 38
   Skill: Factual
   Objective: 2.3
25) Dizygotic twins
   A) have the same genetic makeup.
   B) develop more rapidly than children of single births.
   C) are no more alike than ordinary siblings.
   D) are less likely with each additional birth.
Answer: C
Page Ref: 38
Skill: Conceptual
Objective: 2.3

26) A zygote that separates into two clusters of cells instead of just one produces
   A) identical twins.
   B) dizygotic twins.
   C) fraternal twins.
   D) triple X syndrome.
Answer: A
Page Ref: 38
Skill: Conceptual
Objective: 2.3

27) __________ is/are a major cause of the dramatic rise in multiple births in recent decades.
   A) Prescription drug use during pregnancy
   B) Low maternal weight gain
   C) Young maternal age
   D) Fertility drugs
Answer: D
Page Ref: 38
Skill: Conceptual
Objective: 2.3

28) If the alleles from both parents ________, the child is __________.
   A) are alike; heterozygous
   B) differ; homozygous
   C) are alike; a carrier
   D) differ; heterozygous
Answer: D
Page Ref: 38
Skill: Conceptual
Objective: 2.4

29) The one allele that affects the child’s characteristics is called
   A) dominant–recessive.
   B) dominant.
   C) recessive.
   D) a carrier.
Answer: B
Page Ref: 38
Skill: Factual
Objective: 2.4
30) _______ hair is dominant, while ______ hair is recessive.
   A) Blond; dark
   B) Straight; curly
   C) Red; blond
   D) Curly; straight
Answer: D
Page Ref: 38
Skill: Conceptual
Objective: 2.4

31) In incomplete dominance,
   A) both alleles are expressed, resulting in a combined trait.
   B) the child is homozygous and will display the inherited trait.
   C) only the dominant allele affects the individual’s characteristics.
   D) children have a 50 percent chance of inheriting the disorder if one parent has the trait.
Answer: A
Page Ref: 39
Skill: Conceptual
Objective: 2.4

32) Carriers of the sickle cell gene
   A) often do not display symptoms until after they have passed the gene on to their children.
   B) rarely have children who develop sickle cell anemia.
   C) may have children who have sickle cell anemia.
   D) develop sickle-shaped red blood cells that cause degeneration of the nervous systems.
Answer: C
Page Ref: 39
Skill: Conceptual
Objective: 2.4

33) Eric is more likely than his sister to be negatively affected by X-linked disorders because
   A) males are more likely than females to inherit recessive alleles.
   B) the Y chromosome is much longer than the X chromosome.
   C) the Y chromosome lacks many corresponding alleles to override those carried on the X chromosome.
   D) his sex chromosomes match.
Answer: C
Page Ref: 39
Skill: Applied
Objective: 2.4

34) Children with diabetes tend to have fathers, not mothers, with the illness. The pattern of inheritance is best explained by
   A) incomplete dominance.
   B) X-linked inheritance.
   C) genomic imprinting.
   D) genetic mutation.
Answer: C
Page Ref: 40
Skill: Conceptual
Objective: 2.4
35) Fragile X syndrome is
   A) expressed only when it is passed from father to child.
   B) the most common inherited cause of mental retardation.
   C) expressed when it is passed from either parent to child.
   D) linked to more than half of the cases of autism.
   Answer: B
   Page Ref: 40
   Skill: Conceptual
   Objective: 2.4

36) __________ is a sudden but permanent change in a segment in DNA that can create __________.
   A) Mutation; genetic abnormalities
   B) Meiosis; X-linked disorders
   C) Mitosis, fragile X syndrome
   D) Genomic imprinting; mutations
   Answer: A
   Page Ref: 40
   Skill: Conceptual
   Objective: 2.4

37) Studies of mutation demonstrate that
   A) some mutations occur spontaneously, simply by chance.
   B) mutations are never desirable.
   C) males who are exposed to ionizing forms of radiation are not at increased risk for producing babies with genetic
      abnormalities.
   D) exposure to nonionizing forms of radiation, such as microwaves, can cause genetic damage.
   Answer: A
   Page Ref: 40
   Skill: Conceptual
   Objective: 2.4

38) Somatic mutation
   A) increases with age.
   B) decreases with age.
   C) shows that each of us has a single, permanent genotype.
   D) occurs at conception.
   Answer: A
   Page Ref: 40
   Skill: Conceptual
   Objective: 2.4

39) Characteristics that vary on a continuum among people, such as height, weight, or intelligence, are most likely
    determined by __________ inheritance.
    A) X-linked
    B) polygenic
    C) dominant-recessive
    D) paternal
    Answer: B
    Page Ref: 40
    Skill: Conceptual
    Objective: 2.4
40) Most chromosomal defects result from
   A) X-linked disorders.
   B) mistakes occurring during mitosis.
   C) mistakes occurring during meiosis.
   D) recessive disorders.
   Answer: C
   Page Ref: 40
   Skill: Conceptual
   Objective: 2.5

41) Down syndrome most commonly results from
   A) a failure of the twenty-first pair of chromosomes to separate during meiosis.
   B) increased age of the father.
   C) oxygen deprivation during or immediately after birth.
   D) mutation of the genetic material on the twenty-third chromosomal pair.
   Answer: A
   Page Ref: 40
   Skill: Conceptual
   Objective: 2.5

42) The risk of bearing a child with Down syndrome rises dramatically with
   A) poor prenatal care.
   B) maternal age.
   C) prenatal tobacco exposure.
   D) prenatal malnutrition.
   Answer: B
   Page Ref: 41
   Skill: Conceptual
   Objective: 2.5

43) The most common sex chromosome disorders involve
   A) aggressive and antisocial behavior.
   B) the presence of an extra chromosome or the absence of one X in females.
   C) spontaneous miscarriage.
   D) mental retardation.
   Answer: B
   Page Ref: 41
   Skill: Conceptual
   Objective: 2.5

44) Research on sex chromosome disorders shows that
   A) males with XYY syndrome are more aggressive and antisocial than XY males.
   B) verbal difficulties are common among females who are missing an X chromosome.
   C) females who are missing an X chromosome often have trouble with spatial relationships.
   D) most children with these disorders suffer from mental retardation.
   Answer: C
   Page Ref: 41
   Skill: Conceptual
   Objective: 2.5
45) Mr. and Mrs. Hopewell are concerned because they have been trying to have a baby for over a year. Which of the following procedures would you recommend to them?
   A) gene therapy  
   B) genetic counseling  
   C) genetic engineering  
   D) fetal medicine
   Answer: B
   Page Ref: 42
   Skill: Applied
   Objective: 2.6

46) The communication process of ____________ can help couples understand genetic principles, genetic testing, and prevention of genetic disorders.
   A) genetic engineering  
   B) prenatal diagnosis  
   C) preimplantation genetic diagnosis  
   D) genetic counseling
   Answer: D
   Page Ref: 42
   Skill: Factual
   Objective: 2.6

47) Genetic counselors prepare a __________, which identifies affected relatives in a couple’s family tree.
   A) pedigree  
   B) carrier detector  
   C) prenatal diagnosis  
   D) genetic diagnosis
   Answer: A
   Page Ref: 42
   Skill: Factual
   Objective: 2.6

48) _______________ is commonly used to overcome male reproductive difficulties.
   A) In vitro fertilization  
   B) Surrogacy  
   C) Cloning of fertilized ova  
   D) Donor insemination
   Answer: D
   Page Ref: 42 Box SI: Pros and Cons of Reproductive Technologies
   Skill: Factual
   Objective: 2.6

49) With ____________, a woman is given hormones that stimulate the ripening of several ova. These are removed surgically and placed in a dish of nutrients, to which sperm are added.
   A) donor insemination  
   B) in vitro fertilization  
   C) surrogacy  
   D) genetic engineering
   Answer: B
   Page Ref: 42 Box SI: Pros and Cons of Reproductive Technologies
   Skill: Conceptual
   Objective: 2.6
50) Children conceived through in vitro fertilization
   A) may be genetically unrelated to both of their parents.
   B) tend to develop insecure attachments to their parents during infancy.
   C) cannot be born to postmenopausal women.
   D) tend to be less well-adjusted than their naturally conceived counterparts.
Answer: A
Page Ref: 42 Box SI: Pros and Cons of Reproductive Technologies
Skill: Conceptual
Objective: 2.6

51) Which of the following is an ethical concern regarding the use of reproductive technology?
   A) The in vitro “sex sorter” method could lead to parental sex selection.
   B) Reproductive technology procedures cannot be used to overcome most male fertility problems.
   C) More than 75 percent of reproductive technology procedures result in multiple births.
   D) A lack of genetic ties often strains the parent–child relationship.
Answer: A
Page Ref: 43 Box SI: Pros and Cons of Reproductive Technologies
Skill: Conceptual
Objective: 2.6

52) In _____________, sperm from a man whose wife is infertile are used to inseminate a woman, who is paid for her childbearing services.
   A) donor insemination
   B) surrogate motherhood
   C) in vitro fertilization
   D) genetic engineering
Answer: B
Page Ref: 43 Box SI: Pros and Cons of Reproductive Technologies
Skill: Conceptual
Objective: 2.6

53) To detect problems before birth, doctors use
   A) prenatal diagnostic methods.
   B) genetic treatments.
   C) gene therapies.
   D) carrier detectors.
Answer: A
Page Ref: 43
Skill: Factual
Objective: 2.6

54) Except for _________, prenatal diagnosis should not be used routinely because these methods have some chance of injuring the fetus.
   A) amniocentesis
   B) fetoscopy
   C) chorionic villus sampling
   D) maternal blood analysis
Answer: D
Page Ref: 43
Skill: Conceptual
Objective: 2.6
55) The Human Genome Project is an ambitious international research program aimed at
   A) correcting genetic abnormalities by modifying gene-specified proteins.
   B) cataloging a wide variety of prenatal diagnostic methods.
   C) deciphering the chemical makeup of human genetic material.
   D) genetic engineering.
   Answer: C
   Page Ref: 43
   Skill: Factual
   Objective: 2.6

56) Most adopted children
   A) have trouble developing feelings of trust and affection toward their adoptive parents.
   B) become well-adjusted adults.
   C) fare better if they are adopted after infancy.
   D) begin to search for their birth parents during early adolescence.
   Answer: B
   Page Ref: 45
   Skill: Conceptual
   Objective: 2.7

57) Contemporary researchers view the family as a(n) _____________, or network of interdependent relationships.
   A) exosystem
   B) macrosystem
   C) social system
   D) independent system
   Answer: C
   Page Ref: 46
   Skill: Conceptual
   Objective: 2.8

58) When Erin and Brooke willingly comply, their parents are likely to be warm and gentle in the future. This is an example
    of a(n) __________ influence between parents and their children.
    A) direct
    B) microsystem
    C) macrosystem
    D) indirect
    Answer: A
    Page Ref: 46
    Skill: Applied
    Objective: 2.8

59) Third parties
    A) have a direct influence on development.
    B) can serve as supports for or barriers to development.
    C) rarely have any influence on development.
    D) primarily serve as barriers to early development.
    Answer: B
    Page Ref: 46
    Skill: Factual
    Objective: 2.8
60) When her parents fight, Jess feels worried and afraid. This is an example of
A) internalizing difficulties.
B) direct influences.
C) externalizing difficulties.
D) niche-picking.
Answer: A
Page Ref: 46
Skill: Applied
Objective: 2.8

61) Higher-SES parents tend to emphasize the importance of __________ for their children, whereas lower-SES parents tend to emphasize __________.
A) external characteristics; intellectual abilities
B) intellectual abilities; psychological traits
C) external characteristics; psychological traits
D) psychological traits; external characteristics
Answer: D
Page Ref: 47
Skill: Conceptual
Objective: 2.9

62) In the United States today, about _____ million Americans are affected by poverty.
A) 3.7
B) 15
C) 40
D) 150
Answer: C
Page Ref: 47
Skill: Factual
Objective: 2.9

63) In the United States, the poverty rate for single mothers with preschool children and elderly women on their own is nearly _____ percent.
A) 25
B) 35
C) 40
D) 50
Answer: D
Page Ref: 47
Skill: Factual
Objective: 2.9

64) Although schooling is vital for all children, the __________ has an especially powerful impact on the welfare of families, societies, and future generations.
A) availability of preschool education
B) education of girls
C) education of boys
D) availability of high school education
Answer: B
Page Ref: 48 Box LV: Worldwide Education of Girls
Skill: Conceptual
Objective: 2.9
65) One of the two major benefits of education for girls in developing countries is
   A) time away from the emotional strains of confinement in their homes.
   B) empowerment to improve their life conditions.
   C) enhanced mathematical skills.
   D) time away from the physical strains of working in their homes.
   Answer: B
   
   Page Ref: 48 Box LV: Worldwide Education of Girls
   Skill: Conceptual
   Objective: 2.9

66) Educating girls in the developing world is particularly beneficial because the girls develop
   A) enhanced communication skills.
   B) enhanced mathematical skills.
   C) a desire to move to larger cities.
   D) domestic skills, such as housekeeping.
   Answer: A
   
   Page Ref: 48 Box LV: Worldwide Education of Girls
   Skill: Conceptual
   Objective: 2.9

67) Of all Western nations, __________ has the highest percentage of extremely poor children.
   A) the United States
   B) Canada
   C) Germany
   D) France
   Answer: A
   
   Page Ref: 48
   Skill: Factual
   Objective: 2.9

68) Neighborhoods have a(n) __________ impact on economically disadvantaged than well-to-do young people.
   A) similar
   B) opposite
   C) more negative
   D) greater
   Answer: D
   
   Page Ref: 49
   Skill: Factual
   Objective: 2.10

69) Research on the effects of neighborhoods suggests that
   A) participation in neighborhood organizations does not impact school achievement.
   B) neighborhood resources have a greater impact on children than adults.
   C) neighborhoods affect the well-being of children and adults.
   D) neighborhoods are not important in late adulthood because most elders spend more time in their homes.
   Answer: C
   
   Page Ref: 49
   Skill: Conceptual
   Objective: 2.10
70) Compared with large urban areas, small towns offer
   A) weaker connections between settings that influence children’s lives.
   B) stronger connections between settings that influence children’s lives.
   C) less civic group participation for adults.
   D) better child-care programs for low-SES families.
   Answer: B
   Page Ref: 50
   Skill: Conceptual
   Objective: 2.10

71) Compared to those in large urban areas, adults in small towns are
   A) less likely to have contact with their children’s teachers.
   B) less likely to be actively involved in the community.
   C) more likely to become victims of crime.
   D) more likely to occupy positions of leadership.
   Answer: D
   Page Ref: 50
   Skill: Conceptual
   Objective: 2.10

72) Compared to elders in large cities, elders in small towns are
   A) more likely to move into planned housing for elders.
   B) less likely to develop warm relationships with nonrelatives.
   C) more likely to feel safe and secure.
   D) less likely to remain actively involved in the community.
   Answer: C
   Page Ref: 50
   Skill: Conceptual
   Objective: 2.10

73) One reason that the American people have been reluctant to accept the idea of publicly supported child care is that
   A) few mothers of very young children work outside the home.
   B) it is widely believed that child care is harmful to young children.
   C) most grandparents provide regular child care.
   D) American values emphasize independence and self-reliance.
   Answer: D
   Page Ref: 50
   Skill: Conceptual
   Objective: 2.11

74) In __________, people hold different beliefs and customs from those held by the larger culture.
   A) microsystems
   B) subcultures
   C) macrosystems
   D) collectivist societies
   Answer: B
   Page Ref: 50
   Skill: Conceptual
   Objective: 2.11
75) __________ societies value an __________ self.
   A) Collectivist; independent
   B) Individualistic; interdependent
   C) Collectivist; interdependent
   D) Independent; individualistic
   Answer: C
   Page Ref: 51
   Skill: Conceptual
   Objective: 2.11

76) Laws and government programs designed to improve widespread social problems are known as
   A) public policies.
   B) collectivism.
   C) economic policies.
   D) socialism.
   Answer: A
   Page Ref: 51
   Skill: Conceptual
   Objective: 2.11

77) In the United States, public policies safeguarding __________ lag behind policies for __________.
   A) the elderly; children and youths
   B) children and youths; the elderly
   C) the elderly; extended families
   D) school-age children; preschool children
   Answer: B
   Page Ref: 51
   Skill: Conceptual
   Objective: 2.11

78) Which of the following countries has a higher teenage birthrate?
   A) the United States
   B) Australia
   C) Czech Republic
   D) Poland
   Answer: A
   Page Ref: 51
   Skill: Factual
   Objective: 2.11

79) Which of the following countries has a higher infant death rate?
   A) Singapore
   B) the United States
   C) Ireland
   D) Hong Kong
   Answer: B
   Page Ref: 51
   Skill: Factual
   Objective: 2.11
80) Approximately ________ percent of U.S. children have no health insurance.
   A) 2
   B) 5
   C) 7
   D) 10
   Answer: D
   Page Ref: 51
   Skill: Factual
   Objective: 2.11

81) One reason that public policies safeguarding children are slow to emerge is because
   A) such government policies have failed in other Western countries.
   B) social programs are rarely cost effective.
   C) children cannot vote or speak out to protect their own interests.
   D) the United States already ranks at the top on key measures of children’s health and well-being.
   Answer: C
   Page Ref: 51
   Skill: Conceptual
   Objective: 2.11

82) Which of the following countries has a higher percentage of elderly living in poverty?
   A) Denmark
   B) Norway
   C) United Kingdom
   D) Sweden
   Answer: C
   Page Ref: 52
   Skill: Factual
   Objective: 2.11

83) Social Security and Medicare consume about ______ percent of the U.S. federal budget for the elderly.
   A) 20
   B) 50
   C) 75
   D) 96
   Answer: D
   Page Ref: 52
   Skill: Factual
   Objective: 2.11

84) The minimum income guaranteed to Americans age 65 and older from Social Security is
   A) more generous than those in most other Western nations.
   B) increasing substantially every year.
   C) below the poverty line.
   D) above the poverty line.
   Answer: C
   Page Ref: 52
   Skill: Conceptual
   Objective: 2.11
85) Senior citizens in the United States today are
A) less likely than Canadian seniors to be poverty stricken.
B) more likely than any other group to be among the “near poor.”
C) more likely to be homeless than in the past.
D) less likely to be healthy and independent than in the past.
Answer: B
Page Ref: 52
Skill: Conceptual
Objective: 2.11

86) Nearly half of Americans over age 50 are members of
A) the Children’s Defense Fund.
B) CDF.
C) AARP.
D) the Senior Defense Fund.
Answer: C
Page Ref: 53
Skill: Factual
Objective: 2.11

87) A growing number of researchers regard the question of how much heredity and environment contribute to differences among people as
A) unanswerable.
B) mainly answered by DNA.
C) unimportant.
D) easily answered with kinship studies.
Answer: A
Page Ref: 53–54
Skill: Factual
Objective: 2.12

88) To infer the role of heredity in complex human characteristics, researchers use special methods, the most common being
A) polygenic ranges.
B) kinship estimates.
C) reaction ranges.
D) heritability estimates.
Answer: D
Page Ref: 54
Skill: Factual
Objective: 2.13

89) Dr. Rudy wants to compare the characteristics of family members. What kind of research method would you recommend that Dr. Rudy use?
A) a kinship study
B) a case study
C) a structured observation
D) a passive correlation
Answer: A
Page Ref: 54
Skill: Applied
Objective: 2.13
90) Research on heritability suggests that
A) heritability of personality does not increase over the lifespan.
B) genetic factors play only a minimal role in personality.
C) heritability of personality increases drastically over the lifespan.
D) heritability of intelligence does not increase over the lifespan.
Answer: A  
Page Ref: 54  
Skill: Conceptual  
Objective: 2.13

91) One limitation of twin studies is
A) the environments of most twin pairs are more diverse than those of the general population.
B) most twin pairs are reared together under highly similar environmental conditions.
C) heritability estimates are likely to exaggerate the role of environmental influences.
D) separated twins are often placed in vastly diverse environments.
Answer: B  
Page Ref: 55  
Skill: Conceptual  
Objective: 2.13

92) Because the environments of most twin pairs are less diverse than those of the general population,
A) heritability estimates are likely to exaggerate the role of heredity.
B) it is difficult to generate reaction ranges.
C) kinship studies are rarely conducted.
D) application of heritability estimates is rarely controversial.
Answer: A  
Page Ref: 55  
Skill: Conceptual  
Objective: 2.13

93) Heritability estimates
A) are likely to exaggerate the role of the environment.
B) tend to overestimate the importance of the environment.
C) cannot be used to study complex traits, such as intelligence and personality.
D) are likely to exaggerate the role of heredity.
Answer: D  
Page Ref: 55  
Skill: Conceptual  
Objective: 2.13

94) It is inappropriate to use heritability estimates to explain ethnic differences in intelligence because
A) heritability of intelligence is lower under economically advantaged than disadvantaged rearing conditions.
B) twinning occurs with a higher frequency among some ethnic groups.
C) heritabilities computed on mostly white twin samples are not relevant to test score differences between ethnic groups.
D) ethnic group differences in intelligence are largely due to heredity.
Answer: C  
Page Ref: 55  
Skill: Conceptual  
Objective: 2.13
95) The most serious criticism of heritability estimates is that they
A) are not applicable to people who do not have siblings.
B) can be used only with simple traits, such as eye color and handedness.
C) are not relevant to populations whose home, school, and rearing conditions are very similar.
D) provide no precise information about how the traits examined develop within individuals.
Answer: D
Page Ref: 55
Skill: Conceptual
Objective: 2.13

96) The concept of range of reaction explains that children who are exposed to the same environmental conditions
A) may respond to them differently because of their genetic makeup.
B) tend to overcome their inheritance, so their genes have no effect.
C) tend to show the same pattern of responses over time.
D) respond similarly if they are agemates.
Answer: A
Page Ref: 55
Skill: Conceptual
Objective: 2.14

97) According to the concept of genetic–environmental correlation,
A) the environments to which we are exposed determine our genotype.
B) our genes affect how we respond to the environment.
C) we tend to seek out social partners with a similar genetic makeup.
D) our genes influence the environments to which we are exposed.
Answer: D
Page Ref: 55
Skill: Conceptual
Objective: 2.14

98) Trena and Kyle are actors. Their daughter Sophia participates in children’s theater. This is an example of
A) range of reaction.
B) an evocative correlation.
C) an active correlation.
D) a passive correlation.
Answer: D
Page Ref: 56
Skill: Applied
Objective: 2.14

99) Angela, a cooperative and attentive child, receives more patient and sensitive interactions from her parents than Carlos, who is inattentive and hyper. This is an example of a(n) ________ genetic–environmental correlation.
A) active
B) evocative
C) dynamic
D) passive
Answer: B
Page Ref: 56
Skill: Applied
Objective: 2.14
100) Anthony, a well-coordinated and muscular boy, decides to play high school football. This is an example of a(n) ______ genetic–environmental correlation.
   A) active
   B) passive
   C) dynamic
   D) evocative
   Answer: A
   Page Ref: 56
   Skill: Applied
   Objective: 2.14

101) Through ___________, individuals tend to actively choose environments that complement their heredity.
   A) passive genetic–environmental correlation
   B) niche-picking
   C) evocative genetic–environmental correlation
   D) range of reaction
   Answer: B
   Page Ref: 56
   Skill: Conceptual
   Objective: 2.14

102) Which age group is likely to do more niche-picking?
   A) adolescents
   B) preschoolers
   C) infants
   D) toddlers
   Answer: A
   Page Ref: 56
   Skill: Conceptual
   Objective: 2.14

103) Accumulating evidence reveals that the relationship between heredity and the environment is
   A) a one-way street.
   B) unidirectional.
   C) bidirectional.
   D) primarily negative.
   Answer: C
   Page Ref: 57
   Skill: Conceptual
   Objective: 2.14

104) According to the concept of epigenesis,
   A) heredity determines individual responsiveness to varying environments.
   B) genetic–environmental correlation is entirely driven by genetics.
   C) development results from ongoing, bidirectional exchanges between heredity and the environment.
   D) heredity restricts the development of some behaviors.
   Answer: C
   Page Ref: 57
   Skill: Conceptual
   Objective: 2.14
105) Development is best understood as
   A) genetically determined.
   B) environmentally influenced.
   C) a series of complex exchanges between nature and nurture.
   D) an unsolvable puzzle.
Answer: C
Page Ref: 57
Skill: Conceptual
Objective: 2.14

ESSAY

106) Identify the two types of twins, explain how each is created, and list the factors that influence the incidence of each.
Answer: Identical, or monozygotic, twins occur when one zygote that has started to duplicate separates into two clusters of cells that develop into two individuals. These individuals have the same genetic makeup. Environmental influences that prompt this type of twinning include temperature changes, variation in oxygen levels, and late fertilization of the ovum. In a minority of cases, identical twinning runs in families, suggesting a genetic influence.
   Fraternal, or dizygotic, twins occur when two ova are released at the same time from a woman’s ovaries and both are fertilized. The resulting twins are no more genetically alike than ordinary siblings. This is the most common type of multiple birth, and is often influenced by maternal age, fertility drugs, and in vitro fertilization. Ethnicity, family history, nutrition, and number of prior births also affect the incidence to some degree.
Page Ref: 38

107) Using the inheritance of hair color as an example, explain dominant–recessive inheritance, dominant characteristics, recessive characteristics, and carriers.
Answer: In heterozygous pairings, dominant–recessive inheritance occurs. The dominant allele affects the child’s characteristics. The second allele, which has no effect, is called recessive. The allele for dark hair color is dominant (symbolized by a capital D), whereas the one for blond hair is recessive (symbolized by a lowercase b). The child who inherits a homozygous pair of dominant alleles (DD) and the child who inherits a heterozygous pair (Db) will both be dark-haired. Blond hair can result only from having two recessive alleles (bb). Carriers of a trait are heterozygous individuals with just one recessive allele (Db) who pass that trait to their children.
Page Ref: 38–39

108) List the steps prospective parents can take before conception to increase the chances of a healthy baby.
Answer: The couple should arrange for physical examinations before conception to detect diseases or other medical problems that could reduce fertility or affect the baby. They should consider their genetic makeup. If anyone in the family has had a child with a genetic disease, the couple should seek genetic counseling before conception. Prospective parents can reduce or eliminate toxins under their control. The mother should take prenatal vitamin–mineral supplements, including folic acid, and ensure proper nutrition. They should consult a doctor after 12 months of unsuccessful efforts at conception.
Page Ref: 42
109) Explain how both affluence and poverty can negatively affect development.

Answer: Affluent parents often fail to engage in family interaction and parenting that promotes favorable development. As a group, wealthy parents are nearly as physically and emotionally unavailable to their youngsters as parents coping with poverty. At the same time, affluent parents often make excessive demands for achievement. Adolescents whose parents value their accomplishments more than their character are more likely to have academic and emotional problems.

When families slip into poverty, development is seriously threatened. Children of poverty are more likely than other children to suffer from lifelong poor physical health, persistent deficits in cognitive development and academic achievement, high school dropout, mental illness, and antisocial behavior. The constant stressors that accompany poverty gradually weaken the family system. Poor families have many daily hassles. When daily crises arise, family members become depressed, irritable, and distracted, and hostile interactions increase. Negative outcomes are especially severe in single-parent families and families that must live in poor housing and dangerous neighborhoods.

Page Ref: 47–49

110) How does the education of girls impact the welfare of families and societies in developing countries?

Answer: The diverse benefits of girls’ schooling largely accrue in two ways: (1) through enhanced verbal skills—reading, writing, and oral communication; and (2) through empowerment—a growing desire to improve their life conditions. Education gives people the communicative skills and confidence to seek health services and to benefit from public health information. The empowerment that springs from education is associated with more equitable spousal relationships and a reduction in harsh disciplining of children. The education of girls is the most effective means of combating the profound, global threats to human development: poverty, maternal and child mortality, and disease.

Page Ref: 48

111) Define public policy, and discuss how Americans fare on key measures of childhood health and well-being and policies for the elderly.

Answer: Public policies are laws and government programs designed to reduce widespread social problems like poverty, homelessness, hunger, and disease. U.S. public policies safeguarding children and youths, as well as policies for the elderly, lag behind many other industrialized nations. The United States does not rank well on any key measure of children’s health and well-being. It is the only industrialized nation in the world without a universal, publicly funded health care program. The United States has been slow to move toward national standards and funding for early childhood education and child care. American cultural values of self-reliance and privacy make the government hesitant to become involved in family matters. Social Security and Medicare consume 96 percent of the U.S. federal budget for the elderly; only 4 percent is devoted to other programs.

Page Ref: 51–52

112) Define heritability estimates, and discuss their limitations.

Answer: Heritability estimates measure the extent to which individual differences in complex traits in a specific population are due to genetic factors. Heritability estimates are obtained from kinship studies, which compare the characteristics of family members.

The first criticism of heritability estimates is that they refer only to the particular population studied and its unique range of genetic and environmental influences.

Second, the accuracy of the estimates depends on the extent to which the twin pairs on which they are computed reflect genetic and environmental variation in the population. Because the environments of most twin pairs do not represent the broad range of environments found in the general population, it is often difficult to generalize the findings to the population as a whole. Heritability estimates are likely to exaggerate the role of heredity.

Third, heritability estimates can easily be misapplied. For example, high heritabilities have been used to suggest that ethnic differences in intelligence have a genetic basis. However, this line of reasoning is incorrect because heritabilities computed on mostly white twin samples do not tell us what is responsible for test score differences between ethnic groups.

A final criticism is that these statistics give us no information about how these traits develop or how individuals might respond to environments designed to help them develop as far as possible. Therefore, their usefulness is limited.

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113) Describe the concept of genetic–environmental correlation, including passive, evocative, and active types. Define niche-picking.

Answer: A major problem in trying to separate heredity and environment is that they are often correlated. According to the concept of genetic–environmental correlation, our genes influence the environments to which we are exposed. At younger ages, two types of genetic–environmental correlation are common. In passive correlation, the child has no control over the connection. Parents provide environments influenced by their own heredity. For example, musically inclined parents enroll their children in music lessons. In evocative correlation, children evoke responses that are influenced by the child’s heredity, and these responses strengthen the child’s original style. For example, an active, friendly baby probably receives more social stimulation from parents than a quiet baby. At older ages, active correlation becomes common. Children seek environments that fit with their genetic tendencies. For example, the musically talented child joins the school choir.

Niche-picking is the tendency to actively choose environments that complement our heredity. Infants and toddlers cannot do much niche-picking because adults select environments for them. However, adolescents and adults are increasingly in charge of their environments.

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