

## CHAPTER 3

### PRENATAL DEVELOPMENT

#### MULTIPLE CHOICE

- 1) Today, in Western industrialized nations, the issue of whether to have children is a
- A) biological given.
  - B) compelling social expectation.
  - C) matter of true individual choice.
  - D) matter of legacy.

Answer: C

Page Ref: 91

Skill: Understand

Objective: 3.1

- 2) Changing cultural values in Western industrialized nations allow people to \_\_\_\_\_ than a generation or two ago.
- A) have many children with less fear of social criticism
  - B) remain childless with far less fear of social criticism
  - C) more often emphasize societal obligation over individual fulfillment
  - D) more often choose to give their first child a sibling

Answer: B

Page Ref: 91–92

Skill: Understand

Objective: 3.1

- 3) A survey of over 5,000 U.S. adults of childbearing age revealed that more than 90 percent
- A) do not want to have any children.
  - B) have negative views about the idea of parenthood.
  - C) have two or more children.
  - D) already have children or are planning to have them.

Answer: D

Page Ref: 92

Skill: Remember

Objective: 3.1

- 4) When asked about the advantages of parenthood, Americans and Europeans most often cite
- A) the warm, affectionate relationship that children provide.
  - B) having a source of financial support in later life.
  - C) the sense of future continuity.
  - D) the opportunity to deepen their marital relationship.

Answer: A

Page Ref: 92

Skill: Remember

Objective: 3.1

- 5) When asked about the disadvantages of parenthood, Americans and Europeans most often cite
- A) loss of privacy.
  - B) financial strain.
  - C) role overload.
  - D) work conflicts.

Answer: C

Page Ref: 92

Skill: Remember

Objective: 3.1

- 6) Greater freedom to choose whether, when, and how to have children makes contemporary family planning \_\_\_\_\_ than it was in the past.
- A) less challenging
  - B) more intentional
  - C) less important
  - D) more random

Answer: B

Page Ref: 92

Skill: Understand

Objective: 3.1

- 7) Most U.S. adults plan to have
- A) no children.
  - B) one child.
  - C) no more than two children.
  - D) at least three children.

Answer: C

Page Ref: 93

Skill: Remember

Objective: 3.1

- 8) Currently, the average number of children per woman of childbearing age is \_\_\_\_\_ in the United States.
- A) 3.1
  - B) 2.7
  - C) 2.1
  - D) 1.8

Answer: C

Page Ref: 93

Skill: Remember

Objective: 3.1

- 9) More often than in the past, couples today
- A) get divorced before their childbearing plans are complete.
  - B) are confident about their readiness for parenthood.
  - C) bring children into stable marriages.
  - D) have their first child before the age of 25.

Answer: A

Page Ref: 93

Skill: Understand

Objective: 3.1

- 10) Which of the following statements is supported by research on family size?
- A) Parental quality declines as new children are born.
  - B) New births lead to an increase in maternal affection toward older siblings.
  - C) Limiting family size increases the chances of having children with high intelligence test scores.
  - D) As new children are born, parents tend to reallocate their energies.

Answer: D

Page Ref: 93

Skill: Understand

Objective: 3.1

- 11) Research shows that only children \_\_\_\_\_ children with siblings.
- A) are more intelligent than
  - B) are as well-adjusted as
  - C) have more emotional problems than
  - D) are less intelligent than

Answer: B

Page Ref: 94

Skill: Understand

Objective: 3.1

- 12) Which of the following statements about birthrate trends between 1970 and 2012 is true?
- A) The birthrate increased during this period for women 20 to 24 years of age.
  - B) The birthrate decreased during this period for women 25 years of age and older.
  - C) For women in their thirties, the birthrate during this period rose nearly fivefold.
  - D) The greatest decline in the birthrate during this period was for women in their thirties.

Answer: C

Page Ref: 94

Skill: Remember

Objective: 3.1

- 13) Research on childbearing reveals that
- A) fertility problems do not increase for men between ages 25 and 45.
  - B) fertility problems among women do not show any increase until age 40.
  - C) reproductive technologies are equally successful among younger and older parents.
  - D) a 40-year-old man is less fertile than a 25-year-old man.

Answer: D

Page Ref: 94

Skill: Understand

Objective: 3.1

- 14) An ovum bursts from one of a woman's two \_\_\_\_\_ and is drawn into one of two \_\_\_\_\_.
- A) ovaries; testes
  - B) fallopian tubes; ovaries
  - C) fallopian tubes; placentas
  - D) ovaries; fallopian tubes

Answer: D

Page Ref: 95

Skill: Remember

Objective: 3.2

- 15) The \_\_\_\_\_ secretes hormones that prepare the lining of the uterus to receive a fertilized ovum.
- A) ovaries
  - B) corpus luteum
  - C) fallopian tubes
  - D) cervix

Answer: B

Page Ref: 95

Skill: Remember

Objective: 3.2

- 16) The male produces sperm in the \_\_\_\_\_, two glands located in the \_\_\_\_\_.
- A) penis; scrotum
  - B) scrotum; penis
  - C) testes; penis
  - D) testes; scrotum

Answer: D

Page Ref: 95

Skill: Remember

Objective: 3.2

- 17) Sperm live for up to
- A) twelve hours.
  - B) two days.
  - C) four days.
  - D) six days.

Answer: D

Page Ref: 96

Skill: Remember

Objective: 3.2

- 18) The ovum can survive for \_\_\_\_\_ after it is released into the fallopian tube.
- A) a couple of hours
  - B) one day
  - C) four days
  - D) six days

Answer: B

Page Ref: 96

Skill: Remember

Objective: 3.2

- 19) Most conceptions result from intercourse
- A) during the first week of the menstrual cycle.
  - B) during the last week of the menstrual cycle.
  - C) on the day of ovulation or during the two days following it.
  - D) on the day of ovulation or during the two days preceding it.

Answer: D

Page Ref: 96

Skill: Remember

Objective: 3.2

- 20) Following conception, the one-celled \_\_\_\_\_ multiplies and forms a(n) \_\_\_\_\_.
- A) blastocyst; zygote
  - B) blastocyst; embryo
  - C) zygote; blastocyst
  - D) embryo; fetus

Answer: C

*Page Ref: 96*

*Skill: Remember*

*Objective: 3.2*

- 21) The germinal period lasts
- A) for about 13 weeks, or a trimester.
  - B) from fertilization to implantation.
  - C) for about 6 weeks.
  - D) from conception to fertilization.

Answer: B

*Page Ref: 97*

*Skill: Remember*

*Objective: 3.2*

- 22) The \_\_\_\_\_ becomes the new organism.
- A) embryonic disk
  - B) trophoblast
  - C) amnion
  - D) chorion

Answer: A

*Page Ref: 97*

*Skill: Remember*

*Objective: 3.2*

- 23) The thin outer ring of cells on a blastocyst, termed the trophoblast, will become the
- A) new organism's skin and hair.
  - B) structures that provide protective covering and nourishment.
  - C) embryonic disk.
  - D) nervous system and skin.

Answer: B

*Page Ref: 97*

*Skill: Remember*

*Objective: 3.2*

- 24) Between the seventh and the ninth days after fertilization, \_\_\_\_\_ occurs.
- A) the period of the embryo
  - B) the period of the fetus
  - C) implantation
  - D) cell duplication

Answer: C

*Page Ref: 97*

*Skill: Remember*

*Objective: 3.2*

- 25) The amnion
- A) develops into the nervous system and the skin.
  - B) surrounds the chorion.
  - C) contains one large vein that delivers blood to the developing organism.
  - D) encloses the developing organism in amniotic fluid.

Answer: D

Page Ref: 97

Skill: Understand

Objective: 3.2

- 26) The \_\_\_\_\_ produces blood cells until the developing liver, spleen, and bone marrow are mature enough to take over this function.
- A) amnion
  - B) chorion
  - C) placenta
  - D) yolk sac

Answer: D

Page Ref: 97

Skill: Remember

Objective: 3.2

- 27) Tiny fingerlike villi
- A) emerge from the chorion.
  - B) become the skin.
  - C) become the nervous system.
  - D) develop the skeleton.

Answer: A

Page Ref: 97

Skill: Understand

Objective: 3.2

- 28) Valerie, two months pregnant, wonders how food and oxygen are delivered to the developing organism. You should tell Valerie that the \_\_\_\_\_ performs this function.
- A) chorion
  - B) amnion
  - C) placenta
  - D) neural tube

Answer: C

Page Ref: 97

Skill: Apply

Objective: 3.2

- 29) The placenta is connected to the developing organism by the
- A) uterine wall.
  - B) amnion.
  - C) chorion.
  - D) umbilical cord.

Answer: D

Page Ref: 98

Skill: Remember

Objective: 3.2

- 30) The most rapid prenatal changes take place during the
- A) germinal period.
  - B) period of the fetus.
  - C) period of the embryo.
  - D) final trimester.

Answer: C

*Page Ref: 98*

*Skill: Remember*

*Objective: 3.2*

- 31) The \_\_\_\_\_ becomes the nervous system.
- A) ectoderm
  - B) mesoderm
  - C) endoderm
  - D) trophoblast

Answer: A

*Page Ref: 98*

*Skill: Remember*

*Objective: 3.2*

- 32) At the beginning of the period of the embryo, the \_\_\_\_\_ system develops fastest.
- A) nervous
  - B) circulatory
  - C) digestive
  - D) skeletal

Answer: A

*Page Ref: 98*

*Skill: Remember*

*Objective: 3.2*

- 33) During the second month of pregnancy, the
- A) embryo reacts to light.
  - B) embryo kicks and bends its arms.
  - C) heart begins to pump blood.
  - D) heart develops separate chambers.

Answer: D

*Page Ref: 98*

*Skill: Understand*

*Objective: 3.2*

- 34) During the second month of pregnancy, the embryo
- A) can be irritated by sounds.
  - B) has rapid eye movements.
  - C) responds to touch.
  - D) shields its eyes in response to light.

Answer: C

*Page Ref: 98*

*Skill: Understand*

*Objective: 3.2*

- 35) During the period of the fetus, the
- A) developing organism increases rapidly in size.
  - B) most rapid prenatal changes take place.
  - C) heart begins to pump blood.
  - D) brain is formed.

Answer: A

Page Ref: 99

Skill: Understand

Objective: 3.2

- 36) During the third month of pregnancy,
- A) the fetus can suck its thumb.
  - B) tiny buds become arms, legs, fingers, and toes.
  - C) neuron production begins.
  - D) the eyes, ears, and nose form.

Answer: A

Page Ref: 99

Skill: Understand

Objective: 3.2

- 37) Mel wonders when he will be able to find out the sex of his baby. You tell him that he should be able to detect the sex of the fetus with ultrasound by the \_\_\_\_\_ week of pregnancy.
- A) ninth
  - B) twelfth
  - C) fifteenth
  - D) eighteenth

Answer: B

Page Ref: 99

Skill: Apply

Objective: 3.2

- 38) During Zola's third month of pregnancy, she should
- A) be able to feel the baby move.
  - B) avoid regular exercise.
  - C) be able to hear the baby's heartbeat through a stethoscope.
  - D) be able to tell when the baby is alert.

Answer: C

Page Ref: 99

Skill: Apply

Objective: 3.2

- 39) During her first prenatal visit, LaToya's doctor explains that the \_\_\_\_\_ prevent(s) the skin from chapping during the long months spent bathing in the amniotic fluid.
- A) villi
  - B) vernix
  - C) glial cells
  - D) chorion

Answer: B

Page Ref: 99

Skill: Apply

Objective: 3.2



- 40) Lanugo appears over the entire body during the \_\_\_\_\_ of pregnancy.
- A) second month
  - B) third month
  - C) second trimester
  - D) third trimester

Answer: C

*Page Ref: 99*

*Skill: Remember*

*Objective: 3.2*

- 41) From the twentieth week until birth,
- A) brain weight increases tenfold.
  - B) glial cells decrease at a rapid rate.
  - C) the fetus is viable.
  - D) brain growth slows.

Answer: A

*Page Ref: 99*

*Skill: Understand*

*Objective: 3.2*

- 42) Sara's doctor is looking inside her uterus using fetoscopy. Her 22-week-old fetus may react by
- A) grabbing at the light.
  - B) blinking its eyes.
  - C) shielding its eyes.
  - D) kicking at the light.

Answer: C

*Page Ref: 99*

*Skill: Apply*

*Objective: 3.2*

- 43) The age of viability occurs sometime between \_\_\_\_\_ and \_\_\_\_\_ weeks.
- A) 18; 22
  - B) 20; 24
  - C) 22; 26
  - D) 26; 30

Answer: C

*Page Ref: 99*

*Skill: Remember*

*Objective: 3.2*

- 44) Carmen is prematurely delivering her baby at 28 weeks. The baby will probably
- A) not survive.
  - B) need oxygen assistance to breathe.
  - C) experience intense pain.
  - D) spend the next few weeks with no periods of alertness.

Answer: B

*Page Ref: 99*

*Skill: Apply*

*Objective: 3.3*

- 45) Dimitri was very active in the third trimester. As a 1-year-old, he will probably
- A) handle frustration well.
  - B) be very fearful.
  - C) refuse to interact with unfamiliar adults.
  - D) be easily frustrated.

Answer: A

Page Ref: 100

Skill: Apply

Objective: 3.2

- 46) In one study, more active fetuses during the third trimester became 2-year-olds who
- A) were easily overwhelmed by sensory stimulation.
  - B) had trouble establishing a regular sleep-wake pattern.
  - C) had irregular eating schedules.
  - D) were less fearful.

Answer: D

Page Ref: 100

Skill: Understand

Objective: 3.2

- 47) During the third trimester,
- A) the fetus spends the majority of the day awake.
  - B) painkillers should be used in any surgical procedures performed on a fetus.
  - C) fetuses can hear bodily noises but not noises that occur outside of the womb.
  - D) higher fetal activity is linked with abnormal neurological development.

Answer: B

Page Ref: 100

Skill: Understand

Objective: 3.2

- 48) A study involving the fetal heart rate's response to auditory stimuli during the third trimester suggests that fetuses
- A) cannot hear sounds from the outside world.
  - B) can remember for at least a brief period.
  - C) cannot distinguish between their mother's voice and a stranger's voice.
  - D) cannot distinguish between familiar and unfamiliar melodies.

Answer: B

Page Ref: 100

Skill: Understand

Objective: 3.2

- 49) In the final three months of pregnancy, the fetus
- A) gains more than 5 pounds and grows 7 inches.
  - B) spends the majority of the day awake.
  - C) assumes a right-side-up position.
  - D) gains less than 2 pounds and grows less than 3 inches.

Answer: A

Page Ref: 101

Skill: Understand

Objective: 3.2

- 50) In the eighth month of pregnancy,
- A) fetal growth doubles.
  - B) a layer of fat is added to assist with temperature regulation.
  - C) most fetuses assume an upright position.
  - D) neurons are produced at a rapid rate.

Answer: B

*Page Ref: 101*

*Skill: Understand*

*Objective: 3.2*

- 51) The harm done by teratogens
- A) is not always simple and straightforward.
  - B) always creates a monstrosity or malformation.
  - C) is never subtle.
  - D) can rarely be prevented.

Answer: A

*Page Ref: 101*

*Skill: Understand*

*Objective: 3.3*

- 52) The \_\_\_\_\_ and \_\_\_\_\_ have a long period of sensitivity to teratogens.
- A) hands; feet
  - B) palate; mouth
  - C) arms; legs
  - D) brain; eyes

Answer: D

*Page Ref: 102*

*Skill: Remember*

*Objective: 3.3*

- 53) Which of the following statements about prenatal sensitive periods with respect to teratogens is true?
- A) The fetal period is the time when serious defects are most likely to occur.
  - B) During the embryonic period, teratogens usually affect the growth of sensory organs, such as the eyes and ears.
  - C) In the germinal period, before implantation, teratogens rarely have any impact.
  - D) During the fetal period, teratogens have no impact on the developing organism.

Answer: C

*Page Ref: 102*

*Skill: Remember*

*Objective: 3.3*

- 54) The \_\_\_\_\_ is the time when serious defects from teratogens are most likely to occur.
- A) germinal period
  - B) embryonic period
  - C) fetal period
  - D) third trimester

Answer: B

*Page Ref: 102*

*Skill: Remember*

*Objective: 3.3*

- 55) During the fetal period,
- A) teratogens rarely have any impact.
  - B) teratogens are most likely to cause serious defects.
  - C) the ears can be strongly affected by teratogens.
  - D) teratogenic damage usually causes miscarriage.

Answer: C

Page Ref: 102

Skill: Understand

Objective: 3.3

- 56) Carefully controlled animal experiments reveal that a poorly nourished, underweight fetus experiences changes in body structure and function that greatly increase the risk of \_\_\_\_\_ in adulthood.
- A) breast cancer
  - B) diabetes
  - C) Alzheimer's disease
  - D) cardiovascular disease

Answer: D

Page Ref: 103 Box: Biology and Environment: The Prenatal Environment and Health in Later Life

Skill: Understand

Objective: 3.3

- 57) Jesse weighed 3.3 pounds when he was born. Research shows that he is at an increased risk of \_\_\_\_\_ in adulthood.
- A) prostate cancer
  - B) diabetes
  - C) lymphatic cancer
  - D) Alzheimer's disease

Answer: B

Page Ref: 103 Box: Biology and Environment: The Prenatal Environment and Health in Later Life

Skill: Apply

Objective: 3.3

- 58) At birth, Megan weighed 9.5 pounds. Research shows that she is at an increased risk of \_\_\_\_\_ in adulthood.
- A) diabetes
  - B) lung cancer
  - C) breast cancer
  - D) stroke

Answer: C

Page Ref: 103 Box: Biology and Environment: The Prenatal Environment and Health in Later Life

Skill: Apply

Objective: 3.3

- 59) Children exposed to a sedative called thalidomide were often born
- A) with noncancerous tumors.
  - B) six to eight weeks premature.
  - C) with severe cognitive delays .
  - D) with gross deformities of the arms and legs.

Answer: D

Page Ref: 104

Skill: Understand

Objective: 3.4

- 60) Daughters of mothers who took \_\_\_\_\_ showed unusually high rates of cancer of the vagina, malformations of the uterus, and infertility as they reached adolescence and young adulthood.
- A) thalidomide
  - B) isotretinoin
  - C) diethylstilbestrol (DES)
  - D) aspirin

Answer: C

*Page Ref: 104*

*Skill: Remember*

*Objective: 3.4*

- 61) Currently, the most widely used potent teratogen is prescribed
- A) as a sedative.
  - B) to treat severe acne.
  - C) to prevent miscarriages.
  - D) to treat depression.

Answer: B

*Page Ref: 104*

*Skill: Remember*

*Objective: 3.4*

- 62) Willa, who is pregnant, gets headaches on a regular basis and takes aspirin to relieve the pain. What should you tell Willa about the effects of aspirin use on the developing organism?
- A) Regular aspirin use is completely safe during pregnancy.
  - B) Regular aspirin use can cause gross deformities of the arms and legs during the embryonic period.
  - C) Regular aspirin use is linked to low birth weight and poorer motor development.
  - D) Regular aspirin use is linked to elevated incidence of birth complications, including respiratory distress.

Answer: C

*Page Ref: 104*

*Skill: Apply*

*Objective: 3.4*

- 63) High doses of caffeine during pregnancy
- A) increase the risk of low birth weight.
  - B) is only safe during the first trimester.
  - C) can result in gross fetal abnormalities.
  - D) is linked to respiratory distress in childbirth.

Answer: A

*Page Ref: 104*

*Skill: Understand*

*Objective: 3.4*

- 64) Mateo was born prematurely to Yvonne, a cocaine addict. Mateo's caregivers can expect that
- A) he will have high blood pressure.
  - B) his cries will be abnormally shrill and piercing.
  - C) he will overcome the harmful effects of drug exposure by age 3.
  - D) his motor development will be especially rapid during the first year.

Answer: B

*Page Ref: 104–105*

*Skill: Apply*

*Objective: 3.4*

- 65) It is difficult to isolate the precise damage caused by illegal drug use during pregnancy because
- A) most drug-using mothers refuse to participate in teratology research.
  - B) the majority of babies born to drug-using mothers do not survive for more than a few days.
  - C) most drug-using mothers quit during the first trimester of pregnancy.
  - D) users often take several drugs, display other high-risk behaviors, and suffer from poverty and other stresses.

Answer: D

Page Ref: 105

Skill: Understand

Objective: 3.4

- 66) Beatrice has smoked throughout her pregnancy. Now in her seventh month, Beatrice is considering quitting. You can tell her that
- A) the damage was already done during the germinal period.
  - B) if she quits now, she reduces the likelihood that her infant will be born underweight.
  - C) the damage was already done during the period of the embryo.
  - D) quitting now will not reduce the likelihood that her infant will have colic.

Answer: B

Page Ref: 105

Skill: Apply

Objective: 3.4

- 67) From one-third to one-half of nonsmoking pregnant women
- A) use alcohol regularly.
  - B) smoked prior to finding out they were pregnant.
  - C) take antidepressants.
  - D) are “passive smokers.”

Answer: D

Page Ref: 106

Skill: Remember

Objective: 3.4

- 68) Jenna’s physical growth is slow. She has short eyelid openings, a thin upper lip, a flattened philtrum, and brain injury. Jenna’s mother probably \_\_\_\_\_ during pregnancy.
- A) drank heavily
  - B) smoked cigarettes
  - C) used cocaine
  - D) used methadone

Answer: A

Page Ref: 106

Skill: Apply

Objective: 3.4

- 69) Matthew was prenatally exposed to alcohol. His physical growth is typical and he has no facial abnormalities. However, he has impaired motor coordination, attention span, and memory. Matthew was probably born with
- A) fetal alcohol syndrome (FAS).
  - B) alcohol-related neurodevelopmental disorder (ARND).
  - C) partial fetal alcohol syndrome (p-FAS).
  - D) a genetic disorder.

Answer: B

Page Ref: 106–107

Skill: Apply

Objective: 3.4

- 70) \_\_\_\_\_ is safe to drink during pregnancy.
- A) No amount of alcohol
  - B) One alcoholic beverage per day
  - C) Three to five alcoholic beverages per week
  - D) A few alcoholic beverages per month

Answer: A

Page Ref: 108

Skill: Remember

Objective: 3.4

- 71) Which of the following statements about radiation exposure during pregnancy is true?
- A) Low-level radiation from medical X-rays or industrial leakage is safe.
  - B) Even low-level radiation can increase the risk of childhood cancer.
  - C) The effects of radiation exposure are immediate and apparent.
  - D) Radiation exposure affects physical development, but not cognitive or emotional development.

Answer: B

Page Ref: 108

Skill: Remember

Objective: 3.4

- 72) Pregnant women are wise to avoid \_\_\_\_\_ to reduce the likelihood of mercury exposure.
- A) getting X-rays
  - B) changing cat litter boxes
  - C) painting
  - D) eating long-lived predatory fish

Answer: D

Page Ref: 108

Skill: Remember

Objective: 3.4

- 73) In Taiwan, prenatal exposure to high levels of \_\_\_\_\_ in rice oil resulted in low birth weight, discolored skin, and delayed cognitive development.
- A) dioxins
  - B) mercury
  - C) polychlorinated biphenyls (PCBs)
  - D) lead

Answer: C

Page Ref: 108

Skill: Remember

Objective: 3.4

- 74) Joslyn, a school custodian, is pregnant and works in an old school building where multiple layers of paint are flaking off the walls. To be safe, Joslyn should have the paint tested for \_\_\_\_\_.
- A) polychlorinated biphenyls (PCBs).
  - B) mercury.
  - C) dioxins.
  - D) lead.

Answer: D

Page Ref: 109

Skill: Apply

Objective: 3.4

- 75) Dioxin seems to impair the fertility of \_\_\_\_\_ prior to conception.
- A) X-bearing ova
  - B) Y-bearing sperm
  - C) X-bearing sperm
  - D) Y-bearing ova

Answer: B

Page Ref: 109

Skill: Remember

Objective: 3.4

- 76) The greatest damage from rubella occurs when it strikes pregnant mothers during the
- A) germinal period.
  - B) embryonic period.
  - C) second trimester.
  - D) third trimester.

Answer: B

Page Ref: 110

Skill: Remember

Objective: 3.4

- 77) Which of the following statements about HIV and AIDS is true?
- A) Untreated HIV-infected expectant mothers pass the virus to the developing organism 10 to 20 percent of the time.
  - B) About 15 to 25 percent of prenatal AIDS babies die by 1 year of age.
  - C) There are no available drug therapies that reduce prenatal AIDS transmission without harmful consequences.
  - D) AIDS progresses very slowly in infants, and rarely leads to death.

Answer: A

Page Ref: 110

Skill: Remember

Objective: 3.4

- 78) Kelly, a pregnant 30-year-old, has contracted the most common parasitic infection. Kelly has
- A) rubella.
  - B) toxoplasmosis.
  - C) cytomegalovirus.
  - D) herpes simplex 2.

Answer: B

Page Ref: 110

Skill: Apply

Objective: 3.4

- 79) Expectant mothers can avoid toxoplasmosis by
- A) making sure the vegetables they eat are clean.
  - B) avoiding exposure to X-rays.
  - C) avoiding eating swordfish.
  - D) making sure that the meat they eat is well-cooked.

Answer: D

Page Ref: 111

Skill: Understand

Objective: 3.4



- 80) In healthy, physically fit women, \_\_\_\_\_ exercise is related to \_\_\_\_\_.
- A) regular aerobic; low birth weight
  - B) frequent vigorous; a reduction in risk of high blood pressure
  - C) regular moderate; a reduction in risk of maternal diabetes
  - D) frequent vigorous; high birth weight

Answer: C

Page Ref: 111

Skill: Understand

Objective: 3.5

- 81) Marzanne is pregnant and wonders how much weight she should gain. Her doctor will probably recommend that she gain \_\_\_\_\_ to \_\_\_\_\_ pounds.
- A) 10; 15
  - B) 20; 25
  - C) 25; 30
  - D) 30; 35

Answer: C

Page Ref: 111

Skill: Apply

Objective: 3.5

- 82) A severe famine in the Netherlands during World War II revealed that
- A) the sensitive-period concept operates with nutrition.
  - B) malnutrition during the first trimester is not associated with miscarriage.
  - C) malnutrition during the second trimester is associated with large head size.
  - D) malnutrition during the third trimester is associated with physical defects.

Answer: A

Page Ref: 111

Skill: Understand

Objective: 3.5

- 83) Taking a folic acid supplement around the time of conception reduces by more than 70 percent
- A) the risk of miscarriage.
  - B) infantile hypothyroidism.
  - C) the risk of Down syndrome.
  - D) abnormalities of the neural tube.

Answer: D

Page Ref: 112

Skill: Understand

Objective: 3.5

- 84) Enriching women's diets with calcium
- A) can cause miscarriages in the germinal period.
  - B) helps prevent neural tube defects.
  - C) eliminates the risk of osteoporosis in offspring.
  - D) helps prevent maternal high blood pressure.

Answer: D

Page Ref: 112

Skill: Understand

Objective: 3.5

- 85) Stress-related prenatal complications are greatly reduced when mothers
- A) have partners and friends who offer social support.
  - B) take a low dose of antianxiety medication during pregnancy.
  - C) take a folic acid supplement during pregnancy.
  - D) are placed on bed rest during the third trimester.

Answer: A

Page Ref: 118

Skill: Understand

Objective: 3.5

- 86) The relationship of social support to positive pregnancy outcomes and subsequent child development is \_\_\_\_\_ for \_\_\_\_\_ women.
- A) strongest; affluent
  - B) moderate; minority
  - C) particularly strong; low-income
  - D) strongest; middle-income

Answer: C

Page Ref: 113

Skill: Understand

Objective: 3.5

- 87) One of the goals of the Nurse–Family Partnership is to
- A) eradicate prenatal drug use.
  - B) lessen the effects of teratogens on developing organisms.
  - C) promote early competent caregiving.
  - D) provide family planning and genetic counseling.

Answer: C

Page Ref: 114 Box: Social Issues: Health: The Nurse–Family Partnership: Reducing Maternal Stress and Enhancing Child Development Through Social Support

Skill: Understand

Objective: 3.5

- 88) Which of the following statements about the effectiveness of the Nurse–Family Partnership is true?
- A) The benefits of the intervention were the greatest for children from high-SES families.
  - B) Trained paraprofessionals were more effective than professional nurses in preventing delayed mental development.
  - C) As kindergartners, program children scored higher in language, but lower in intelligence, than comparison children.
  - D) From their baby's birth on, home-visited mothers were on a more favorable life course than comparison mothers.

Answer: D

Page Ref: 114 Box: Social Issues: Health: The Nurse–Family Partnership: Reducing Maternal Stress and Enhancing Child Development Through Social Support

Skill: Remember

Objective: 3.5

- 89) Which of the following statements about Rh factor incompatibility is true?
- A) The damage caused by Rh incompatibility can be avoided if the mother receives a blood transfusion during delivery.
  - B) Rh-positive blood is dominant and Rh-negative blood is recessive, so the chances are good that a baby will be Rh-positive.
  - C) Rh-positive babies are routinely given a vaccine at birth to prevent the buildup of harmful Rh antibodies.
  - D) The harmful effects of Rh incompatibility can be prevented if the newborn is immediately placed on a diet low in phenylalanine.

Answer: B

Page Ref: 113

Skill: Remember

Objective: 3.5

- 90) Rh factor incompatibility
- A) affects Rh-positive mothers.
  - B) can result in infant death.
  - C) cannot be prevented in most cases.
  - D) usually affects firstborn children.

Answer: B

Page Ref: 113

Skill: Understand

Objective: 3.5

- 91) Danica is a healthy 35-year-old woman who is pregnant with her first child. Danica is
- A) more likely than a younger woman to have a baby with low birth weight.
  - B) likely to have a longer and more difficult labor than a younger woman.
  - C) more likely to have prenatal complications than a woman in her twenties.
  - D) as likely as a younger woman to have no prenatal or birth complications.

Answer: D

Page Ref: 114

Skill: Apply

Objective: 3.5

- 92) Infants born to teenagers have a higher rate of problems because
- A) teenagers' reproductive organs are not yet mature enough to support a pregnancy.
  - B) teenagers are not yet physically ready to give birth.
  - C) many pregnant teenagers are afraid to seek medical care.
  - D) teenagers are exposed to more teratogens than other pregnant mothers.

Answer: C

Page Ref: 115

Skill: Understand

Objective: 3.5

- 93) In later pregnancy, a diabetic mother's excess blood glucose causes the fetus to
- A) lose weight.
  - B) grow unusually large.
  - C) secrete abnormally low levels of insulin.
  - D) develop chromosomal abnormalities.

Answer: B

Page Ref: 116 Box: Biology and Environment: Prenatal Iron Deficiency and Memory Impairments in Infants of Diabetic Mothers

Skill: Understand

Objective: 3.6

- 94) Which of the following statements about research on memory impairments in infants of diabetic mothers is true?
- A) Prenatal iron depletion interferes with the cerebral cortex, causing long-term learning and academic problems in children of diabetic mothers.
  - B) Damage to the hippocampus is not linked to long-term learning and academic problems in children of diabetic mothers.
  - C) Diabetes-linked prenatal brain damage is linked to short-term memory impairments that can often be reversed with medication.
  - D) As a result of iron depletion in critical brain areas, a diabetic pregnancy places the fetus at risk for lasting memory deficits.

Answer: D

Page Ref: 116 Box: *Biology and Environment: Prenatal Iron Deficiency and Memory Impairments in Infants of Diabetic Mothers*

Skill: *Remember*

Objective: 3.6

- 95) Kali's face, hands, and feet began to swell in the second half of her pregnancy. Kali's doctor began to monitor her blood pressure. The doctor was probably concerned about
- A) toxoplasmosis.
  - B) maternal diabetes.
  - C) Rh incompatibility.
  - D) preeclampsia.

Answer: D

Page Ref: 115

Skill: *Apply*

Objective: 3.6

- 96) Which of the following mothers is most likely to receive inadequate prenatal care?
- A) Harriet, a 16-year-old African American
  - B) Marissa, a 25-year-old Caucasian American
  - C) Rachel, a 32-year-old Caucasian American
  - D) Janette, a 40-year-old Hispanic American

Answer: A

Page Ref: 117

Skill: *Apply*

Objective: 3.6

- 97) In group prenatal care,
- A) expectant mothers are grouped by age, and each group is seen by an assigned health-care provider.
  - B) trained leaders provide expectant mothers with a group discussion session after each medical checkup.
  - C) expectant mothers and fathers take turns facilitating group discussions.
  - D) whole families are included in prenatal visits, including mothers, fathers, and siblings.

Answer: B

Page Ref: 117

Skill: *Understand*

Objective: 3.6

- 98) In a study of more than 100 U.S. first-time expectant married couples who were interviewed about their pregnancy experiences,
- A) an unplanned pregnancy was especially likely to spark positive feelings among participants.
  - B) about one-third of participants reported mixed or neutral feelings about their pregnancies.
  - C) no participants felt negatively about their pregnancies by the third trimester.
  - D) about two-thirds of participants reported mixed or neutral feelings to learning they were expecting.

Answer: C

Page Ref: 118

Skill: *Understand*

Objective: 3.7

- 99) Which of the following statements about models of effective parenthood is true?
- A) Overall, men are more likely than women to communicate effectively, be flexible when family problems arise, and build a healthy picture of themselves as successful parents.
  - B) Parents who have had positive experiences in their own childhoods often have trouble building a healthy picture of themselves as parents and have conflicted relationships with their children.
  - C) Many parents come to terms with negative experiences in their own childhoods, recognize that other options are available to them, and build healthier and happier relationships with their children.
  - D) When men and women have had poor relationships with their own parents, they are more likely to develop positive images of themselves as parents.

Answer: C

Page Ref: 119

Skill: Remember

Objective: 3.7

- 100) The most important preparation for parenthood
- A) takes place in the context of the parents' relationship.
  - B) is having a positive relationship with one's own parents.
  - C) involves attending prenatal classes.
  - D) is having support from extended family.

Answer: A

Page Ref: 119

Skill: Understand

Objective: 3.7

## ESSAY

- 101) When Americans and Europeans are asked about their motivations for parenthood, what are the most frequent advantages and disadvantages they list?

Answer: Although some ethnic and regional differences exist, in all groups highly rated reasons for having children include personal rewards—for example, the warm, affectionate relationship and opportunities for care and teaching that children provide. Also frequently mentioned are social and economic returns, such as affirmation of one's adult status and children as a source of caregiving and financial support in later life. Less important, but still mentioned, is a sense of future continuity—having someone to carry on after one's own death. And occasionally, couples look to parenthood as a gratifying opportunity to share in a challenging but important life task and to deepen their relationship. Among disadvantages of parenthood, adults most often cite concerns about role overload (not enough time for both family and work responsibilities), doubts about their own readiness for parenthood, and worries about bringing children into a troubled world. The financial strains of child rearing follow close behind.

Page Ref: 92

- 102) Describe the germinal period, including the major developments that occur during this period.

Answer: The germinal period lasts about two weeks, from fertilization and formation of the zygote until the tiny mass of cells drifts down and out of the fallopian tube and attaches itself to the wall of the uterus. The zygote's first cell duplication is long and drawn out; it is not complete until about 30 hours after conception. Gradually, new cells are added at a faster rate. By the fourth day, 60 to 70 cells exist that form a hollow, fluid-filled ball called a blastocyst. The cells on the inside of the blastocyst, called the embryonic disk, will become the new organism; the thin outer ring of cells, termed the trophoblast, will become the structures that provide protective covering and nourishment. Between the seventh and ninth days, implantation occurs: The blastocyst burrows deep into the uterine lining. Structures that feed and protect the developing organism begin to form—amnion, yolk sac, chorion, placenta, and umbilical cord. By the end of the germinal period, the developing organism has found food and shelter. Already, it is a complex being.

Page Ref: 97–98

103) What are teratogens? What factors determine their impact?

Answer: The term teratogen refers to any environmental agent that causes damage during the prenatal period. The harm done by teratogens is not always simple and straightforward. It depends on the following factors:

- *Dose.* Larger doses over longer time periods usually have more negative effects.
- *Heredity.* The genetic makeup of the mother and the developing organism plays an important role. Some individuals are better able than others to withstand harmful environments.
- *Other negative influences.* The presence of several negative influences at once, such as additional teratogens, poor nutrition, and lack of medical care, can worsen the impact of a single harmful agent.
- *Age.* The effects of teratogens vary with the age of the organism at the time of exposure. Some parts of the body, such as the brain and eye, have long sensitive periods that extend throughout prenatal development. Other sensitive periods are much shorter. In the germinal period, before implantation, teratogens rarely have any impact. If they do, the tiny mass of cells is usually so damaged that it dies. The embryonic period is the time when serious defects are most likely to occur because the foundations for all body parts are being laid down. During the fetal period, teratogenic damage is usually minor. However, organs such as the brain, ears, eyes, teeth, and genitals can still be strongly affected.

*Page Ref: 101–102*

104) Describe the effects of exercise during pregnancy.

Answer: In healthy, physically fit women, regular moderate exercise, such as walking, swimming, biking, or an aerobic workout, is related to improved fetal cardiovascular functioning, higher birth weight, and a reduction in the risk for certain complications, such as pregnancy-induced maternal diabetes and high blood pressure. However, frequent, vigorous exercise, especially late in pregnancy, results in lower birth weight than in healthy, nonexercising controls. Hospital-sponsored childbirth education programs frequently offer exercise classes and suggest appropriate routines that help prepare for labor and delivery. During the last trimester, when the abdomen grows very large, mothers have difficulty moving freely and often must cut back on exercise. Most women, however, do not engage in sufficient moderate exercise during pregnancy to promote their own and their baby's health. An expectant mother who remains fit experiences fewer physical discomforts, such as back pain, upward pressure on the chest, or difficulty breathing in the final weeks. Pregnant women with health problems, such as circulatory difficulties or a history of miscarriages, should consult their doctor about a physical fitness routine. For these mothers, exercise (especially the wrong kind) can endanger the pregnancy.

*Page Ref: 111*

105) Terra is Rh-negative and her husband, Marcus, is Rh-positive. Advise Terra about the consequences of this blood type incompatibility.

Answer: Terra should know that when inherited blood types of mother and fetus differ, serious problems sometimes result. The most common cause of these difficulties is Rh factor incompatibility. When the mother is Rh-negative (lacks the Rh blood protein) and the father is Rh-positive (has the protein), the baby may inherit the father's Rh-positive blood type. Because Rh-positive blood is dominant and Rh-negative blood is recessive, the chances are good that the baby will be Rh-positive. If even a little of a fetus's Rh-positive blood crosses the placenta into the Rh-negative mother's bloodstream, she begins to form antibodies to the foreign Rh protein. If these enter the fetus's system, they destroy red blood cells, reducing the oxygen supply to organs and tissues. Intellectual disability, miscarriage, heart damage, and infant death can occur. It takes time for the mother to produce Rh antibodies, so firstborn children are rarely affected. The danger increases with each additional pregnancy. Fortunately, Rh incompatibility can be prevented in most cases. After the birth of each Rh-positive baby, Rh-negative mothers are routinely given a vaccine to prevent the buildup of antibodies. In emergency cases, blood transfusions can be performed immediately after delivery or, if necessary, even before birth.

*Page Ref: 113*

106) Cite reasons that some women do not seek prenatal care.

Answer: Inadequate care is far more common among adolescent and low-income, ethnic minority mothers. Although government-sponsored health services for low-income pregnant women have been expanded, some do not qualify and must pay for at least part of their care. Besides financial hardship, some mothers have situational barriers, including difficulty finding a doctor, getting an appointment, and arranging transportation, and insensitive or unsatisfying experiences with clinic staff. Other mothers have personal barriers, including psychological stress, the demands of taking care of other young children, family crises, lack of knowledge about the signs of pregnancy and benefits of prenatal care, and ambivalence about the pregnancy. Many also engage in high-risk behaviors, such as smoking and drug abuse, which they do not want to reveal to health professionals.

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