

1. The pear-shaped muscular organ in a woman's abdomen that houses a developing baby is the:
  - A) cervix.
  - B) uterus.
  - C) fallopian tube.
  - D) ovum.
  
2. Jeanine has had surgery on the pair of slim, pipe-like structures that connect her ovaries with her uterus. Jeanine has had surgery on her:
  - A) fallopian tubes.
  - B) ovaries.
  - C) uterus.
  - D) ova.
  
3. The male structure, known as the \_\_\_\_\_, is comparable to the ovaries in females.
  - A) testes
  - B) sperm
  - C) penis
  - D) hormones
  
4. At conception, there are 20 percent \_\_\_\_\_ males than females; at birth, there are 5 percent \_\_\_\_\_ males than females.
  - A) more; more
  - B) fewer; more
  - C) more; fewer
  - D) fewer; fewer
  
5. Implantation refers to the:
  - A) fertilization of the egg.
  - B) time during which all major organs of the fetus are constructed.
  - C) process in which the sperm penetrates the egg lining and burrows into the egg.
  - D) process in which a blastocyst becomes embedded in the uterine wall.
  
6. The embryonic period of development lasts for about \_\_\_\_\_ weeks.
  - A) 2
  - B) 6
  - C) 15
  - D) 24

7. The proximodistal sequence of development refers to the concept that growth occurs from the:
- A) extremities towards the trunk of the body.
  - B) large structures to the smaller structures.
  - C) most interior parts of the body outward.
  - D) head to the tail (top to bottom).
8. The fluid-filled chamber which provides a “home” for the developing fetus, as well as insulation from infection and harm, is the:
- A) amniotic sac.
  - B) umbilical cord.
  - C) placenta.
  - D) neural tube.
9. Martha is about 18 weeks pregnant and has begun to experience the sensation known as “quickening.” Martha is feeling:
- A) crowning.
  - B) false labor.
  - C) the fetus moving inside the womb.
  - D) heartburn.
10. Research that explores the long-term effects of pregnancy traumas on the development of babies later in life is known as \_\_\_\_\_ research.
- A) fetal programming
  - B) intrauterine
  - C) prenatal
  - D) teratogen
11. Exposure to harmful substances is MOST likely to cause major structural damage to a fetus during the \_\_\_\_\_ stage of development.
- A) embryonic
  - B) fetal
  - C) germinal
  - D) post-partum
12. The most common chromosomal abnormality causes:
- A) sickle cell anemia.
  - B) Huntington's disease.
  - C) Tay-Sachs disease.
  - D) Down syndrome.

13. Jesse's wife is in the second stage of labor, when he notices the scalp of the baby for the first time. Jesse's baby is:
- A) crowning.
  - B) dilating.
  - C) effacing.
  - D) contracting.
14. A preterm baby refers to a baby that has arrived in the world more than \_\_\_\_\_ early.
- A) two days
  - B) one week
  - C) two weeks
  - D) three weeks
15. Infant mortality refers to deaths that occur within the first \_\_\_\_\_ of life.
- A) day
  - B) month
  - C) year
  - D) two years

## **Answer Key**

1. B
2. A
3. A
4. A
5. D
6. B
7. C
8. A
9. C
10. A
11. A
12. D
13. A
14. D
15. C

1. Explain the sequence from fertilization to implantation.
2. Explain the three core principles of prenatal development, giving examples of each.
3. Compared to many other mammals, humans spend an incredibly long time in the womb. In one sentence, explain the main reason why this is so.
4. You are a developmentalist lecturing to nurse midwives about the emotional quality of pregnancy. Discuss some forces that predict patients' having a joyous or unhappy pregnancy experience.
5. List some basic teratogenic principles.
6. Discuss the research on the impact of excessive drinking during pregnancy. How does alcohol affect the fetus? Which women are at risk for drinking during pregnancy? What role do cultural norms play in the tendency to use alcohol when pregnant?
7. Discuss the teratogenic impact of stress during pregnancy. What specific effects might stress have on the fetus? Which are the main considerations, issues, and findings in this area?
8. A couple, both carriers of the cystic fibrosis gene, visit a genetic counselor for advice. What should the counselor say?
9. Xenia carries the gene for hemophilia and asks a doctor for information about her risks should she decide to have children. What should the doctor let Xenia know?
10. Define Assisted Reproductive Technologies (ART), discuss its variations, and explore the concerns, issues, and problems facing couples who choose to undergo these procedures.
11. Give a brief account of the history of birth in the developed world.

12. Briefly discuss social policy birth issues in the developed world and the main birth issue in the developing world.

## Answer Key

1. (1) Answers should include three distinct events in order: (1) the zygote rapidly divides and enters the uterus about 3 days later; (2) the blastocyst forms; and (3) the blastocyst develops projections, and roughly 14 days after fertilization, fully implants into the uterine wall.
2. Examples may vary. Cephalocaudal = (head to tail, or top to bottom) head before legs and feet; proximodistal = (inside to outside) arms before fingers; mass-to-specific = (big structures before details) eyes before eyelashes.
3. It takes a long time to form the human brain.
4. Forces predicting a positive/negative experience: whether the woman has a nurturing support system; whether there are serious money worries, although this may not be less of a problem if the person has a loving support system.
5. (1) Teratogens exert their effects during the sensitive period for development; (2) Major structural damage can result if exposure occurs during the embryonic stage, while the developing brain can be affected throughout pregnancy; (3) There is often a threshold level required for a teratogen to have an effect, but the risk of damage is unpredictable, as some fetuses and mothers are more or less vulnerable; and (4) The damaging effect of a given teratogen may sometimes show up later in development, not just directly after birth.
6. Alcohol crosses the placenta, inhibiting normal neural growth and producing potential learning and behavior problems. Specifically, children born to alcoholic mothers may have a condition called Fetal Alcohol Syndrome (FAS), characterized by small birth weights, impaired brain development, facial abnormalities, and serious developmental disorders. These children may also have a less severe set of conditions called Fetal Alcohol Spectrum Disorders. Binge drinking or having several drinks throughout pregnancy puts children at highest risk, although the odds vary depending on the resilience of the mother and fetus. Most women stop drinking after learning they are pregnant, or cut down their intake dramatically. Those who continue tend to be anxious or depressed. Ironically though, in one study in the Netherlands, well-educated women were most likely to continue to drink (but only socially) when pregnant. In general, Europeans are more lax than U.S. women about urging total abstinence from alcohol during pregnancy, as in European nations, having a glass or two of wine with meals is a “normal” cultural practice.
7. When pregnant women undergo excessive levels of stress, the main risk is going into labor early. Stress hormones transmitted to the fetus via the amniotic fluid might also cause a newborn to be excessively jumpy during the first months of life. Although the research on the impact of pregnancy stress on the fetus is confusing, the timing and intensity of the stressors seem to make a difference. For instance: Is the person experiencing an overload of problems or an unwanted pregnancy? Did the stressful events occur in late pregnancy or immediately before conception? Most important, how does the woman cope with stress? Does she take steps to positively confront her problems or does she bury her anxieties and act out through self-destructive behaviors such as smoking or excessive alcohol use?
8. The counselor should tell the couple that each child they conceive will have a 1 in 4 chance of getting cystic fibrosis (CF). Cystic fibrosis (CF) is still an incredibly

life-shortening disease, but today some people can live to their thirties with this illness. The counselor also should tell them to be prepared for repeated hospitalizations. They and other family members will experience much stress. There are tests they can take during the first trimester or second trimesters of pregnancy to find out if a fetus will have the illness. The counselor should let the couple know that their decision to have a test and to go forward with any pregnancy is up to them.

9. Hemophilia is a sex-linked illness, so Xena's sons will have a fifty-fifty (or 50 percent) chance of having hemophilia, while her daughters will have a fifty-fifty (or 50 percent) chance of being carriers for the disease. The good news is that while in the past, hemophilia was often fatal at a young age, now it can be controlled by blood transfusions.
10. Assisted reproductive technologies (ART) refer to any procedure in which fertilization occurs outside of the womb. Today, there are many variations of ART. Doctors may inject the partner's sperm directly into the egg (if the issue is male fertility problems); the woman may use a donor egg or rely on a sperm bank to conceive. If she cannot undergo a full pregnancy, the woman's fertilized egg may be inserted into "a carrier womb" (another woman) to carry the baby to term. If a third party is involved, ART can produce emotional complications. But the main issue for couples considering ART is that this procedure is costly, time consuming, and success rates—especially at older maternal ages—are low. ART babies have a slightly higher risk of birth defects. Also, couples may have to undergo a distressing procedure called "fetal reduction" if too many inserted embryos "take" since there is a higher risk of miscarriage with multiple births. Still, Assisted reproductive technologies (ART) can offer an incredible gift to couples who would not otherwise be able to have their own biological child.
11. Before the twentieth century, birth was dangerous. Physicians knew next to nothing about the female anatomy, their interventions carried the risk of infection (making childbirth more dangerous), and women shunned hospitals because they were full of disease. Then, during the early twentieth century, the field of medicine advanced, maternal mortality plummeted, and birth in a hospital became the norm. In the 1960s, women began to protest the medicalization of birth, and the natural childbirth movement took off. Today, affluent women have many options along a continuum from natural to medical when they give birth.
12. Social policy birth issues in the developed world: high rates of cesarean sections (C-sections) and clear socioeconomic differences in infant mortality in every affluent nation. For instance, poor women are at higher risk of giving birth to premature babies. The main birth issue in the developing world: unacceptable lack of access to decent prenatal care and routine obstetrical interventions, such as C-sections, in the world's most impoverished nations.



1. The structure housing the eggs is/are the \_\_\_\_\_.
2. The ovum descends through the \_\_\_\_\_ to reach the uterus.
3. The union of the sperm and egg is called \_\_\_\_\_.
4. The stage of prenatal development in which all the major organs are formed is called the \_\_\_\_\_ stage.
5. The single-cell fertilized ovum is called the \_\_\_\_\_.
6. During the first two weeks of prenatal development, the germinal stage, the developing mass of cells prepare for \_\_\_\_\_.
7. The cylindrical structure called the \_\_\_\_\_ eventually develops into the brain and spinal cord.
8. The three guiding principles related to prenatal development are the cephalocaudal, proximodistal, and \_\_\_\_\_ sequences.
9. During the final phase of prenatal development, called the fetal stage, the vital structure that is developing is the \_\_\_\_\_.
10. The risk of miscarriage is highest during the \_\_\_\_\_ trimester of pregnancy.
11. A pregnant woman's sense of connection to her baby often intensifies during the second trimester when the landmark event called \_\_\_\_\_ occurs.
12. Major organ damage may result if a baby is exposed to teratogens during the embryonic stage, while the main teratogenic problem may be developmental disorders during the \_\_\_\_\_ stage.
13. Smoking during pregnancy can produce a \_\_\_\_\_ baby.

14. The field of research that studies how intense stress during pregnancy affects the baby's lifelong development is called \_\_\_\_\_.
15. \_\_\_\_\_ is the birth condition caused by having an extra chromosome on pair 21.
16. With dominant single-gene disorders, the odds that a baby will have that condition are \_\_\_\_\_.
17. During the first trimester of pregnancy, \_\_\_\_\_ typically is used to diagnose fetal genetic disorders.
18. During the second trimester of pregnancy, \_\_\_\_\_ typically is used to diagnose fetal genetic disorders.
19. Infertility is defined as the inability to conceive or carry a baby to term after \_\_\_\_\_ of unprotected intercourse.
20. \_\_\_\_\_ is the name for any infertility treatment in which the egg is fertilized outside of the womb.
21. During the \_\_\_\_\_ stage of childbirth, called birth, the baby emerges from the womb.
22. In the third stage of labor and birth, the \_\_\_\_\_ is expelled.
23. \_\_\_\_\_ is the term for giving birth without medical interventions.
24. When the doctor makes incisions in the abdominal wall in order to extract the baby, the procedure is called a \_\_\_\_\_.
25. A very low-birth-weight (VLBW) baby is defined as weighing less than \_\_\_\_\_.

## Answer Key

1. ovaries
2. fallopian tube
3. fertilization
4. embryonic
5. zygote
6. implantation
7. neural tube
8. mass-to-specific; mass to specific
9. brain
10. first
11. quickening
12. fetal
13. smaller-than-normal (or “low birth weight (LBW)”)
14. fetal programming research
15. Down syndrome
16. 1 in 2 (or “50 percent”)
17. chorionic villus sampling; CVS
18. amniocentesis
19. 1 year (or “one year”)
20. Assisted reproductive technology; ART
21. second
22. placenta
23. Natural childbirth
24. cesarean section (or “c-section”)
25. 3 1/4 pounds; 3.25 pounds; 3 1/4 lbs; 3.25lbs

1. Pregnancy is typically a time of:
  - A) incredible excitement and fear.
  - B) unusual inner calm.
  - C) intense anger.
  - D) pure happiness.
  
2. The pipelike \_\_\_\_\_ serves as a conduit to the uterus.
  - A) fallopian tube
  - B) cervix
  - C) vesicles
  - D) ovary
  
3. All are true of the cervix EXCEPT that it:
  - A) expands dramatically to allow the baby to emerge during birth.
  - B) is the lower neck of the uterus.
  - C) is an amazingly flexible muscle.
  - D) houses the developing baby in a woman's abdomen.
  
4. Sperm is to ovum as testis is to:
  - A) fallopian tube.
  - B) ovary.
  - C) uterus.
  - D) cervix.
  
5. Danielle asks, "Are new sperm continually produced?" Which reply is correct?
  - A) "Yes. Sperm are manufactured continuously."
  - B) "No. All sperm are formed early in life."
  - C) "Yes and no. Some sperm are present early in life. Others are continually manufactured."
  - D) "Scientists have no data relating to this question."
  
6. Maru asks, "To get pregnant, when is the best time to have intercourse?" Which reply is correct?
  - A) "right around the time of ovulation"
  - B) "a week before ovulation"
  - C) "just before menstruation"
  - D) "There is no ideal time."

7. When a sperm penetrates the nucleus of the ovum, the two meld into one cell. That event is called \_\_\_\_\_.  
A) fertilization  
B) ovulation  
C) genesis  
D) zygoty
8. Phillip asks, "How many chromosomes do humans have?" Which reply is correct?  
A) 11.5  
B) 23  
C) 46  
D) 92
9. Genes:  
A) function as templates for producing proteins.  
B) produce human chromosomes.  
C) produce human DNA.  
D) produce mainly waste material
10. Jack and Diane desperately want a son. What are their odds of getting this wish?  
A) It's a coin toss; there is a 50 percent chance of having a male.  
B) Because the Y chromosomes carrying sperm are lighter and faster, the odds favor having a male.  
C) Because the X chromosomes carrying sperm are larger and faster, the odds favor having a girl.  
D) Even though more males are conceived, the odds favor having a girl.
11. More males are conceived and \_\_\_\_\_ males die in utero and during each stage of life.  
A) more  
B) fewer  
C) 1 in 0.5  
D) 1 in 2
12. Which is the correct sequence of events during the germinal stage?  
A) fertilization, blastocyst, implantation  
B) blastocyst, fertilization, implantation  
C) implantation, fertilization, blastocyst  
D) fertilization, implantation, blastocyst

13. Link the correct terms about prenatal development to the following descriptions: (1) union of sperm and egg; (2) first cell; (3) first phase of prenatal development; (4) structure that implants in the uterine wall.
- A) (1) fertilization; (2) zygote; (3) germinal period; (4) blastocyst
  - B) (1) germinal period; (2) zygote; (3) blastocyst; (4) zygote
  - C) (1) blastocyst; (2) zygote; (3) germinal period; (4) fertilization
  - D) (1) zygote; (2) blastocyst; (3) fertilization; (4) germinal period
14. Which is the correct sequence?
- A) ovulation, fertilization, zygote, blastocyst, implantation
  - B) fertilization, ovulation, blastocyst, implantation, zygote
  - C) zygote, ovulation, fertilization, implantation, blastocyst
  - D) fertilization, ovulation, blastocyst, implantation
15. During the germinal stage, the:
- A) ovum is released from the ovaries.
  - B) blastocyst begins to embed into the uterine wall.
  - C) heart begins to form.
  - D) placenta begins to form.
16. Darwa asks Ethan, "What is the main function of the placenta?" Ethan should answer that the placenta:
- A) "removes waste from the mother."
  - B) "provides nutrients to the fetus."
  - C) "keeps the fetus from sliding out of the uterus."
  - D) "supports the pregnant woman's health."
17. Development during the embryonic stage is fast-paced, while development during the fetal stage occurs:
- A) more slowly.
  - B) at a faster pace.
  - C) at the same pace.
  - D) halts.
18. The earliest structure to form during the embryonic stage is the \_\_\_\_\_.
- A) heart
  - B) hands
  - C) legs
  - D) fingers

19. Which is/are formed during the embryonic stage?
- A) major body organs
  - B) digestive system alone
  - C) circulatory system alone
  - D) brain alone
20. During the embryonic period, \_\_\_\_\_ is/are formed.
- A) the neural tube alone
  - B) the arms and legs alone
  - C) the circulatory system alone
  - D) every major body structure
21. All are true of the neural tube EXCEPT that it:
- A) appears during the early embryonic stage.
  - B) will eventually form the brain and spinal cord.
  - C) contains almost all the neurons people have throughout life.
  - D) is formed during the fetal stage.
22. Jaime asks Olga, “When do the vast majority of human neurons form?” Olga should answer:
- A) “in the womb—that is, well before birth.”
  - B) “during the first year of life”
  - C) “during childhood”
  - D) “it's a trick question—neurons steadily form throughout life.”
23. Link each statement to the correct principle of prenatal development: (1) the arms form before the hands; (2) the head forms before the feet; (3) the fingers form before the fingernails.
- A) (1) proximodistal; (2) cephalocaudal; (3) mass to specific
  - B) (1) cephalocaudal; (2) proximodistal; (3) mass to specific
  - C) (1) mass to specific; (2) cephalocaudal; (3) proximodistal
  - D) (1) cephalocaudal; (2) mass to specific; (3) proximodistal
24. Match each prenatal stage to the appropriate description: (1) first 2 weeks after fertilization; (2) all major body organs form; (3) final stage lasting roughly 7 months.
- A) (1) embryonic; (2) germinal; (3) fetal
  - B) (1) fetal; (2) germinal; (3) embryonic
  - C) (1) germinal; (2) embryonic; (3) fetal
  - D) (1) germinal; (2) fetal; (3) embryonic

25. Match each process to the appropriate prenatal stage: (1) brain development; (2) implantation; (3) neural tube forms.
- A) (1) fetal stage; (2) germinal stage; (3) embryonic stage
  - B) (1) embryonic stage; (2) germinal stage; (3) fetal stage
  - C) (1) fetal stage; (2) fetal stage; (3) embryonic stage
  - D) (1) embryonic stage; (2) fetal stage; (3) fetal stage
26. The brain forms during:
- A) the germinal phase.
  - B) the embryonic stage.
  - C) the fetal stage.
  - D) every stage of prenatal development.
27. Which is the correct sequence of events in prenatal brain development?
- A) neural tube forms; brain cells migrate upward; cells lengthen and form branches
  - B) brain cells migrate upward; neural tube forms; cells lengthen and form branches
  - C) cells lengthen and form branches; neural tube forms; brain cells migrate upward
  - D) brain cells migrate upward; cells lengthen and form branches; neural tube forms
28. An important structure that does NOT develop mainly during the embryonic stage is the \_\_\_\_\_.
- A) heart
  - B) brain
  - C) arms
  - D) liver
29. When do humans first begin to be able to hear and see?
- A) during the embryonic stage
  - B) during the later fetal stage
  - C) at birth
  - D) after birth
30. If Martha goes into premature labor, when is the earliest date she can possibly give birth to a live baby?
- A) the 12<sup>th</sup> to 14<sup>th</sup> week of pregnancy
  - B) the 22<sup>nd</sup> to 23<sup>rd</sup> week of pregnancy
  - C) the 28<sup>th</sup> to 29<sup>th</sup> week of pregnancy
  - D) Predictions are impossible.



31. If a woman has given birth in week 25 of her pregnancy, the baby will:
- A) have more than a 50 percent chance of surviving, with good medical care.
  - B) not be able to survive.
  - C) almost surely survive.
  - D) initially survive, but almost certainly die a few weeks after birth.
32. Who experiences the early pregnancy symptom called couvade?
- A) males
  - B) females
  - C) could be either gender
  - D) both genders
33. Professor Misra is an evolutionary psychologist. To explain morning sickness, what statement would he make?
- A) "Morning sickness evolved to protect the embryo from poisonous foods."
  - B) "Morning sickness is all in the mind. Women who expect to get sick, do."
  - C) "A woman who has morning sickness is unconsciously rejecting her fetus."
  - D) "Women who have morning sickness are at high risk for miscarrying."
34. Mabel is likely to experience all of the following symptoms during her first trimester of pregnancy EXCEPT:
- A) morning sickness.
  - B) breast tenderness.
  - C) looking visibly pregnant.
  - D) feeling tired and faint.
35. Women may feel incredibly tired and experience morning sickness during the \_\_\_\_\_ trimester.
- A) first
  - B) second
  - C) second and third
  - D) third
36. Pregnant women are MOST apt to feel physically uncomfortable during \_\_\_\_\_.
- A) their first and third trimesters
  - B) their second and third trimesters
  - C) their first and second trimesters
  - D) every trimester

37. Quickening refers to the first:
- A) time the mother hears the baby's heartbeat.
  - B) time the mother feels the baby move.
  - C) time the baby moves.
  - D) signs of labor.
38. A mom becomes intensely bonded to her child. According to the text, this feeling is MOST likely to occur after what event?
- A) fertilization
  - B) quickening
  - C) labor
  - D) morning sickness
39. Flavia tells Francesca, "I feel incredibly attached to my child now!" Flavia is MOST apt to make this statement during the:
- A) first trimester.
  - B) second trimester.
  - C) third trimester.
  - D) embryonic phase.
40. To predict the emotional experience of a pregnant patient, a nurse practitioner might ask all of the following questions EXCEPT:
- A) "Do you have serious money worries?"
  - B) "Do you have a caring, loving support system?"
  - C) "Are you married?"
  - D) "Do you feel loved by your mate?"
41. Carla just learned she is pregnant. Which force should BEST predict her having a joyous experience?
- A) not gaining too much weight
  - B) feeling supported and loved
  - C) being married
  - D) quitting work

42. Nadya is unmarried, pregnant, and does not have a partner. According to the research, she:
- A) can't possibly have a happy experience.
  - B) can have a happy experience if she feels supported and loved by family members and friends.
  - C) won't have a happy experience unless she gives up working and attempts to find a partner.
  - D) will have a happier experience than if she was married.
43. Dads-to-be:
- A) are less bonded to the fetus than are their wives.
  - B) are pampered by society today.
  - C) can feel that their emotions are marginalized.
  - D) may withdraw emotionally from their families.
44. The text's main message with regard to "pregnant dads" is that society needs to focus:
- A) more on the mom's experience, not the dad's.
  - B) more on the dad's experience, as pregnancy is a critical life event for men, too.
  - C) on making sure that men are working in order to support the mom and the baby.
  - D) on not paying so much attention to men.
45. A teratogen:
- A) is a gene that causes a birth defect.
  - B) develops during the third trimester of pregnancy.
  - C) enters the ovum with the sperm.
  - D) is a poisonous substance that crosses the placenta, harming the fetus.
46. The toxic effect of a teratogen is MOST likely to occur during the \_\_\_\_\_ of development—that is, when a specific system or organ is forming most rapidly.
- A) early stage
  - B) sensitive period
  - C) consolidation
  - D) germinal stage

47. Flora's baby has developmental disabilities, which the doctor has tied to Flora's excessive alcohol use during her pregnancy. This neural damage MOST likely occurred during:
- A) the first trimester.
  - B) the second and third trimesters.
  - C) the third trimester alone.
  - D) at birth.
48. If Tien drinks heavily throughout her pregnancy, her baby's problem MOST likely will be a(n):
- A) malformation of a major body structure.
  - B) developmental disorder.
  - C) ability to take in nourishment.
  - D) failure to cry.
49. An obstetrician is giving a talk about teratogens. The doctor would state that damage from a given teratogen:
- A) is most likely to occur during the third trimester.
  - B) is identical for every woman.
  - C) is most likely to occur at high levels of exposure.
  - D) always shows up soon after birth.
50. If a woman smokes during pregnancy, she risks giving birth to a(n):
- A) excessively large child.
  - B) smaller-than-normal child.
  - C) child with severe brain damage.
  - D) child with severe physical impairments.
51. \_\_\_\_\_ women smoke during pregnancy. (pick best answer)
- A) Very few
  - B) Almost all
  - C) A certain percentage of
  - D) Half of all
52. Kalisha is pregnant and addicted to nicotine. She asks her doctor to convince her that smoking will harm the baby. The doctor will MOST likely tell Kalisha that she risks:
- A) having a less healthy baby.
  - B) having an obese child.
  - C) giving birth to a severely impaired baby.
  - D) having a miscarriage in the first trimester.

53. A student is writing a paper on the effects of prenatal drinking on the baby. The student should state that the exposed baby may have all of these problems EXCEPT:
- A) learning and memory difficulties.
  - B) facial abnormalities.
  - C) no arms and short legs.
  - D) trouble regulating his behavior.
54. A woman smokes during pregnancy and has a baby with learning problems. Which assumption would a developmentalist MOST likely make?
- A) The problem may or may not be due to smoking as this woman could have put her baby's health at risk in other ways.
  - B) Smoking definitely caused these problems.
  - C) An experiment can easily be done to show if smoking was the cause of this baby's difficulties.
  - D) A correlational study will give answers as to whether smoking was the cause of this baby's learning problems.
55. In summarizing the research related to prenatal stress and the fetus, which is NOT a comment Sandra should make?
- A) Maternal stress always has a marked negative impact on the developing child.
  - B) Excessive stress may raise the risk of premature labor.
  - C) The way women cope with stress may be important.
  - D) Intense stress immediately before conception can have an impact on the developing child.
56. The BEST conclusion relating to the impact of maternal stress on fetal development is that:
- A) the research is confusing.
  - B) the research is clear.
  - C) stress always has an impact on the fetus.
  - D) stress has no impact on the fetus.
57. Jing is devising a questionnaire to explore whether maternal stress will affect a fetus. All of the following are legitimate questions to ask EXCEPT:
- A) "How does this woman cope with life problems?"
  - B) "Did this woman experience a major life trauma right before getting pregnant?"
  - C) "Did this woman experience stress during the third trimester?"
  - D) "Does this woman have a husband?"

58. Fetal programming research explores how:
- A) drinking and smoking during pregnancy affects the baby.
  - B) disasters and severe life stress during pregnancy affect a baby's lifelong health.
  - C) love during pregnancy affects the baby.
  - D) playing classical music affects the baby in utero.
59. According to fetal programming research, if a woman experiences intense stress while pregnant, the impact on the baby \_\_\_\_\_.
- A) is confined to early childhood
  - B) may be lifelong
  - C) occurs mainly during adolescence
  - D) shows up only in old age
60. The bottom-line message of fetal programming research is that intense stress in the womb:
- A) can impair lifelong health.
  - B) sets babies up to be thin throughout adult life.
  - C) mainly affects babies at birth.
  - D) has little impact on later development.
61. A child with Down syndrome has all of the following attributes EXCEPT:
- A) an extra chromosome (or piece) on pair 21.
  - B) little chance of living past age 18.
  - C) mild to moderate mental impairment.
  - D) a stocky appearance and flat facial features.
62. Which is NOT a statement that is true of a child with Down syndrome?
- A) The risk of giving birth to this baby is highest among women over 40.
  - B) These children have a shortened life expectancy.
  - C) These children are almost always severely mentally impaired.
  - D) These children can have happy, fulfilling lives.
63. A social worker who counsels Down syndrome teens asks a researcher what will happen to her clients in their forties and fifties. Which reply should this expert give?
- A) "Unfortunately, almost all of your clients will be dead by this age."
  - B) "Unfortunately, your clients will be at high risk of getting Alzheimer's disease."
  - C) "Fortunately, your clients will be aging very well."
  - D) "Fortunately, your clients will improve dramatically in their cognitive abilities."

64. A single-gene disorder that shows up when a baby has one copy of an abnormal gene is called \_\_\_\_\_.  
A) trisomy  
B) recessive  
C) dominant  
D) sex-linked
65. Bonnie and Clyde just found out they both carry the recessive gene for sickle cell anemia. Maria and Manuel are first-time parents in their forties. Which couple should be MOST worried about having a baby with a genetic or chromosomal problem?  
A) Bonnie and Clyde  
B) Maria and Manuel  
C) Both couples are at equally high risk.  
D) Both couples are at equally low risk.
66. A sex-linked single-gene disorder is usually transmitted from:  
A) father to son.  
B) mother to daughter.  
C) mother to son.  
D) father to daughter.
67. Annysa has a child with cystic fibrosis (CF) and has just gotten pregnant again. What are her odds of having a second CF child?  
A) She has a 1 in 4 chance.  
B) She has a 50 percent chance.  
C) She already has one child with the disorder, so the risk is low.  
D) There is no way of assessing her odds.
68. Huntington's disease, the fatal dominant single-gene disorder, is still in the population because this illness:  
A) strikes in adulthood, after people have had children.  
B) cannot be detected through genetic testing.  
C) occurs in groups that forbid contraception.  
D) tends to enhance fertility.
69. \_\_\_\_\_ is a sex-linked disorder.  
A) Cystic fibrosis (CF)  
B) Hemophilia  
C) Sickle cell anemia  
D) Huntington's disease

70. Which serious single-gene disease shows its first symptoms during adulthood?
- A) sickle cell anemia
  - B) hemophilia
  - C) Huntington's disease
  - D) Tay Sachs disease
71. Gerard is a genetic counselor. Which statement should he make to a couple that has a child with cystic fibrosis and is considering another pregnancy?
- A) "The odds of your next child having the disease are 1 in 4."
  - B) "The odds of your next child having the disease are 1 in 2."
  - C) "With your family history, you should definitely terminate this pregnancy."
  - D) "Don't worry about your odds. Today cystic fibrosis is easily controlled with medication."
72. If Mary is going for an ultrasound during her pregnancy, she will be able to:
- A) clearly see the baby's face and body.
  - B) find out if the baby has a genetic disease.
  - C) find out who the baby's father is.
  - D) find out if the baby will look like her.
73. Amniocentesis is performed:
- A) during the second trimester.
  - B) before conception.
  - C) during the first trimester.
  - D) after birth.
74. Which prenatal procedure is most dangerous?
- A) The ultrasound
  - B) Chorionic villus sampling (CVS)
  - C) Amniocentesis
  - D) A doctor's examination
75. A patient tells her doctor she is pregnant. The doctor would urge the woman to undergo chorionic villus sampling (CVS) if she:
- A) previously had a baby with Tay Sachs disease.
  - B) is 40 years old.
  - C) has no risk factors for problems, but wants to ensure her child is born healthy.
  - D) has a bleeding disorder.



76. Link the appropriate prenatal procedure with each of the following descriptions: (1) a more risky prenatal diagnostic test taken during the first trimester; (2) a safer prenatal diagnostic test taken during the second trimester.
- A) (1) amniocentesis; (2) chorionic villus sampling (CVS)
  - B) (1) chorionic villus sampling (CVS); (2) amniocentesis
  - C) (1) ultrasound; (2) amniocentesis
  - D) (1) amniocentesis; (2) ultrasound
77. Which prenatal test samples the fluid that surrounds the fetus?
- A) ultrasound
  - B) amniocentesis
  - C) chorionic villus sampling (CVS)
  - D) measurement of gestational age
78. Based on the text discussion, which statement is NOT true about infertility?
- A) This issue puts stress on both partners.
  - B) It may disturb women more than men.
  - C) This condition is usually caused by “female” physical problems.
  - D) It is most apt to strike older couples who try to conceive.
79. Elena is coping with infertility. In determining her stress level, what is the most important question to ask?
- A) Do you have a supportive partner?
  - B) How old are you?
  - C) Do you have a good job?
  - D) Are you middle class?
80. Moriah and her husband Mesud are having fertility problems. According to statistics, the person responsible for these problems is:
- A) Mesud.
  - B) Moriah.
  - C) equally Mesud or Moriah.
  - D) the doctor.
81. Assisted reproductive technologies (ART):
- A) can be very expensive and stressful.
  - B) have a high success rate.
  - C) are easy procedures to carry out.
  - D) rarely result in live births.

82. All occur *only* with assisted reproductive technologies (ART) EXCEPT for:
- A) injecting sperm directly into the egg.
  - B) using a donor egg.
  - C) being a surrogate mom.
  - D) taking fertility drugs.
83. Which woman will only be able to conceive using in-vitro fertilization?
- A) Latasha, who is having trouble ovulating
  - B) Karen, whose fallopian tubes are *permanently* blocked (or missing)
  - C) Rai, who is having trouble carrying a child to term
  - D) Ruth, who is over age 40
84. Abby is considering in-vitro fertilization. All of the following are cautions related to the treatment EXCEPT that this procedure:
- A) can be very expensive.
  - B) may demand a huge time commitment.
  - C) practically never works.
  - D) is emotionally draining.
85. With regard to birth, “efface” means to:
- A) open up.
  - B) thin out.
  - C) see the top of the baby's head.
  - D) contract.
86. Which is the correct order of events during labor?
- A) birth; dilation and effacement; expulsion of placenta
  - B) dilation and effacement; birth; expulsion of placenta
  - C) expulsion of placenta; birth; dilation and effacement
  - D) dilation and effacement; expulsion of placenta; birth
87. Which woman is just entering “stage two” of labor?
- A) Winnie is thrilled to see the top of her baby's head emerge.
  - B) Yolanda's contractions are 5 minutes apart.
  - C) Zara's placenta is coming out.
  - D) Vanya's cervix has dilated.

88. During the third stage of labor and birth:
- A) a woman feels intense, painful contractions.
  - B) the baby's head emerges.
  - C) the placenta is expelled.
  - D) the cervix dilates and effaces.
89. Which statement is NOT a threat to a safe, healthy birth?
- A) The placenta is attached to the upper part of the uterus.
  - B) Labor begins too early.
  - C) The baby is positioned feet first.
  - D) The cervix cannot fully dilate.
90. Before the twentieth century:
- A) women often gave birth at home because hospitals were full of disease.
  - B) doctors understood the female anatomy.
  - C) only wealthy women could afford hospital births.
  - D) women gave birth using the Lamaze method.
91. Which of the following is NOT a reason why eighteenth and nineteenth century doctors were relatively ineffective during labor and birth?
- A) Physicians couldn't view the female anatomy.
  - B) Doctors didn't realize that they needed to wash their hands.
  - C) Medical professionals tended to yank the baby out.
  - D) Doctors charged excessive fees.
92. Which is the correct historical sequence of birth-related "events"?
- A) childbirth becomes medically safe; natural childbirth movement; a variety of birth options
  - B) natural childbirth movement; childbirth becomes medically safe; a variety of birth options
  - C) a variety of birth options; natural childbirth movement; childbirth becomes medically safe
  - D) childbirth becomes medically safe; a variety of birth options; natural childbirth movement
93. Which definition relates to each labor term: (1) doula; (2) epidural; (3) Lamaze?
- A) (1) anesthetic; (2) coach; (3) breathing exercises
  - B) (1) coach; (2) breathing technique; (3) anesthetic
  - C) (1) coach; (2) anesthetic; (3) breathing exercises
  - D) (1) anesthetic; (2) breathing coach; (3) breathing exercises

94. Cesarean section (c-section) rates \_\_\_\_\_ from 1970 to 2000:
- A) dramatically increased in the developed world.
  - B) dramatically decreased around the world.
  - C) remained stable around the world.
  - D) dramatically increased in the developing world.
95. Which is the MOST important global issue facing pregnant women today?
- A) too many c-sections in the developed world
  - B) no access to high quality medical interventions in the most impoverished world regions
  - C) few options for giving birth in the developed world
  - D) too many options for giving birth in the developed world
96. If Simba is a poor pregnant woman living in Ghana, her main concern is apt to be:
- A) having an unnecessary c-section.
  - B) surviving childbirth.
  - C) choosing from many possible birth options.
  - D) having a doula.
97. With regard to twenty-first-century birth, all are major social issues EXCEPT:
- A) high cesarean-section (c-section) rates in the developed world.
  - B) high rates of infant and maternal mortality in poor regions of the globe.
  - C) higher rates of infant mortality among poor women living in affluent nations.
  - D) a disturbing lack of birth options among affluent women.
98. Which newborn has the highest Apgar score?
- A) Dong, whose body has a healthy color and who is kicking and crying
  - B) Brian, whose hands and feet are a dusky blue color
  - C) Adrian, who lies limp and quiet on the examining table
  - D) Juba, whose heart is beating, but the doctor must give her oxygen to help her breathe
99. Juan weighed 2 pounds at birth and spent months in the infant intensive care unit (ICU). Juan MOST likely:
- A) will have learning problems but only during early childhood.
  - B) could be fine, but also is at high risk of having lingering, lifelong problems.
  - C) will be fine once he leaves the hospital.
  - D) will die during the first year of life.

100. Which message is NOT a bottom-line message of the text's discussion of very low-birth-weight (VLBW)?
- A) Very low-birth-weight (VLBW) babies are at higher risk of having lifelong problems.
  - B) Very low-birth-weight (VLBW) babies are sure to have lifelong problems.
  - C) Doctors are able to save many more very low-birth-weight (VLBW) babies than in the past.
  - D) There is controversy among doctors as to whether to intervene when a baby is born at “the cusp” of viability.
101. As of 2015, infant mortality in the United States:
- A) is high compared to other developed nations.
  - B) is low compared to other developed nations.
  - C) occurs at the same rate for women at all socioeconomic levels.
  - D) is higher than in the past.

## Answer Key

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

- 45. D
- 46. B
- 47. B
- 48. A
- 49. C
- 50. B
- 51. C
- 52. A
- 53. C
- 54. A
- 55. A
- 56. A
- 57. D
- 58. B
- 59. B
- 60. A
- 61. B
- 62. C
- 63. B
- 64. C
- 65. A
- 66. C
- 67. A
- 68. A
- 69. B
- 70. C
- 71. A
- 72. A
- 73. A
- 74. B
- 75. A
- 76. B
- 77. B
- 78. C
- 79. A
- 80. C
- 81. A
- 82. D
- 83. B
- 84. C
- 85. B
- 86. B
- 87. A
- 88. C
- 89. A
- 90. A

- 91. D
- 92. A
- 93. C
- 94. A
- 95. B
- 96. B
- 97. D
- 98. A
- 99. B
- 100. B
- 101. A



1. A woman's cervix expands to push the baby out of the uterus during birth.  
A) True  
B) False
2. Sperm can live for several days inside a woman's reproductive tract.  
A) True  
B) False
3. More male babies than female babies are conceived.  
A) True  
B) False
4. During implantation, the blastocyst embeds itself in the uterine wall.  
A) True  
B) False
5. By the end of the embryonic period, the major human body structures and organs are formed (with the exception of the brain).  
A) True  
B) False
6. By the end of the embryonic period, the neurons have migrated to the top of the neural tube.  
A) True  
B) False
7. Very few babies born before the twenty-eighth week of pregnancy survive.  
A) True  
B) False
8. Morning sickness typically occurs during the fetal stage of development.  
A) True  
B) False
9. Quickening occurs during the third trimester of pregnancy.  
A) True  
B) False

10. A crucial factor predicting the emotional quality of pregnancy is whether the mom-to-be feels nurtured and loved.
  - A) True
  - B) False
11. Developmentalists, along with the wider world, tend to pay less attention to the emotions of dads-to-be than they do to pregnant moms' emotions.
  - A) True
  - B) False
12. Teratogens produce deformities in the major body structures during the first trimester of pregnancy.
  - A) True
  - B) False
13. Teratogens tend to affect the developing fetal brain during the second and third trimesters.
  - A) True
  - B) False
14. A woman's reports that she quit smoking during pregnancy are totally trustworthy.
  - A) True
  - B) False
15. Traumatic life events during pregnancy can promote low birth weight and end up programming the baby to “put on pounds” during life.
  - A) True
  - B) False
16. A person with a dominant single-gene disorder inherits a faulty gene from each parent.
  - A) True
  - B) False
17. Sex-linked single-gene disorders are typically passed down from mothers to sons.
  - A) True
  - B) False

18. Unlike amniocentesis, chorionic villus sampling (CVS) takes place during the first trimester of pregnancy.  
A) True  
B) False
19. To be classified as infertile, a couple must have unprotected sex for one year without conceiving.  
A) True  
B) False
20. The success rate for in vitro fertilization approaches 80 percent.  
A) True  
B) False
21. In vitro fertilization is typically an expensive procedure.  
A) True  
B) False
22. It is unusual for a baby's head to appear first during birth.  
A) True  
B) False
23. The cesarean section (C-section) rate has been declining in the developed world.  
A) True  
B) False
24. Today, women in developed countries have a variety of birth choices.  
A) True  
B) False
25. Infant mortality refers to deaths that occur within the first year after birth.  
A) True  
B) False
26. Adoptive parents are naturally less bonded to their babies than biological parents.  
A) True  
B) False



## **Answer Key**

1. A
2. A
3. A
4. A
5. A
6. B
7. B
8. B
9. B
10. A
11. A
12. A
13. A
14. B
15. A
16. B
17. A
18. A
19. A
20. B
21. A
22. B
23. B
24. A
25. A
26. B

1. The almond-shaped organ(s) where the ova reside is/are called the:
  - A) ovaries.
  - B) fallopian tubes.
  - C) cervix.
  - D) uterus.
  
2. The process that involves the union of a sperm and an egg is known as:
  - A) ovulation.
  - B) hormonal balancing.
  - C) fertilization.
  - D) cervical fluid.
  
3. Which of the following is true of human chromosomes?
  - A) Some normally-developing humans have fewer or more than 46 chromosomes.
  - B) Each human has an identical number of paired chromosomes, one contributed by the mother and the other contributed by the father.
  - C) The mother contributes most of the chromosomes to the baby.
  - D) Each chromosome pair is a perfect match, including the chromosomes that determine gender.
  
4. The first two weeks of prenatal development, from fertilization to implantation, is called the \_\_\_\_\_ stage.
  - A) fetal
  - B) germinal
  - C) placental
  - D) embryonic
  
5. A developing baby absorbs nutrients through the \_\_\_\_\_, which is a structure projecting from the wall of the uterus during pregnancy.
  - A) placenta
  - B) cervix
  - C) ovum
  - D) blastocyst
  
6. The cylindrical structure that will eventually develop into the brain is the:
  - A) cephalocaudal tube.
  - B) couvade.
  - C) neural tube.
  - D) blastocyst.

7. Prenatal growth occurs from the most interior parts of the body outward. This prenatal principle is known as the \_\_\_\_\_ sequence.
- A) mass to specificity
  - B) proximodistal
  - C) viability
  - D) cephalocaudal
8. Karen is giving her newborn a bath. She is cleaning the baby's belly button, which is where the \_\_\_\_\_ was attached to the baby.
- A) neurons
  - B) blastocyst
  - C) amniotic sac
  - D) umbilical cord
9. Ariel is 28 weeks pregnant. While she reports feeling “great,” her husband has been complaining of symptoms typical of morning sickness. Her husband may be suffering from:
- A) gestational diabetes.
  - B) teratogen sickness.
  - C) couvade.
  - D) pregnancy.
10. All of the following characterize morning sickness EXCEPT that it:
- A) often involves queasiness that can occur periodically all day.
  - B) may be an evolutionary mechanism to keep pregnant women from eating spoiled foods.
  - C) tends to occur only in the morning.
  - D) tends to occur only during the first trimester.
11. Which is the MOST important force that determines the emotional quality of a pregnancy?
- A) feeling cared about and loved
  - B) getting adequate prenatal care
  - C) being affluent
  - D) having the child's father present

12. Exposure to teratogens can affect the developing brain:
- A) only before a woman knows she is pregnant.
  - B) only during the first trimester.
  - C) only in extremely rare situations; in general, the baby is immune to teratogens that affect the mother.
  - D) throughout pregnancy.
13. The first stage of labor, when the cervix widens enough to allow the baby to emerge, is called:
- A) expulsion.
  - B) crowning.
  - C) dilation and effacement.
  - D) delivery.
14. Rachel was born one hour ago. She has already been given:
- A) neonatal intensive care.
  - B) the Apgar scale.
  - C) the PKU (phenylketonuria) scale.
  - D) the viability scale.
15. Infant mortality rates vary depending on the country and geographic region. Which country has a rate of 115 deaths per 1,000 live births as of 2014?
- A) United States
  - B) Haiti
  - C) Afghanistan
  - D) Spain



## **Answer Key**

1. A
2. C
3. B
4. B
5. A
6. C
7. B
8. D
9. C
10. C
11. A
12. D
13. C
14. B
15. C