Chapter 02: Human Reproductive Anatomy and Physiology

MULTIPLE CHOICE

1. A 14-year-old boy is at the pediatric clinic for a checkup. What physical changes of puberty will the nurse indicate are related to the production of testosterone?
   a. Stimulation of production of white cells and platelets
   b. Promotion of growth of small bones
   c. Increase in muscle mass and strength
   d. Decrease in production of sebaceous gland secretions
   ANS: C
   Testosterone increases muscle mass, promotes strength and growth of long bones, and enhances production of red blood cells.

   DIF: Cognitive Level: Knowledge REF: Page 20-21 OBJ: 1 | 2 | 5
   TOP: Male Reproductive System KEY: Nursing Process Step: Data Collection
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

2. The nurse is educating high school students about puberty. What will the nurse indicate regulates the production of sperm and secretion hormones?
   a. Testes
   b. Vas deferens
   c. Ejaculatory ducts
   d. Prostate gland
   ANS: A
   The testes have two functions: manufacture of spermatozoa and secretion of androgens.

   DIF: Cognitive Level: Knowledge REF: Page 21 OBJ: 3 | 5
   TOP: Male Reproductive System KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

3. The nurse is speaking with a couple trying to conceive a child. What will the nurse remind the couple is a factor that can decrease sperm production?
   a. Infrequent sexual intercourse
   b. The man not being circumcised
   c. The penis and testes being small
   d. The testes being too warm
   ANS: D
   The scrotum is suspended away from the perineum to lower the temperature of the testes for sperm production.
4. When describing the female reproductive tract to a pregnant woman, the nurse would explain that which uterine layer is involved in implantation?
   a. Perimetrium
   b. Endometrium
   c. Myometrium
   d. Internal os
   
   ANS: B
   The endometrium is the inner mucosal layer of the uterus that is governed by cyclical hormonal changes. It is functional during menstruation and during the implantation of a fertilized ovum.

5. A group of nursing students plans to teach a class of sixth-grade girls about menstruation. What correct information will the nursing students teach to the class?
   a. Menarche usually occurs around 12 years of age.
   b. Ovulation occurs regularly from the very first cycle.
   c. A regular cycle is established by the third period.
   d. Typically, menstrual flow is heavy and lasts up to 10 days.
   
   ANS: A
   The beginning of menstruation, called menarche, occurs at about 12 years of age. Early cycles are irregular and anovulatory.

6. A 10-year-old girl asks the nurse, “What is the first sign of puberty?” What is the correct nursing response?
   a. An increase in height
   b. Breast development
   c. Appearance of axillary hair
   d. The first menstrual period
   
   ANS: B
   The first outward change of puberty in girls is the development of breasts at about 10 to 11 years of age.
7. A 12-year-old female pediatric patient experienced menarche 3 months ago. Her mother voices concern to the pediatric office nurse regarding the irregularity of her daughter’s menstrual cycle. What is the nurse's best response?
a. “Worrying is not the answer.”
b. “I will talk to the pediatrician about a gynecological referral.”
c. “I can only discuss this with your daughter.”
d. “Early cycles are often irregular.”
ANS: D
Early cycles are often irregular and may be anovulatory. Regular cycles are usually established within 6 months to 2 years of the menarche. In an average cycle, the flow (menses) occurs every 28 days, plus or minus 5 to 10 days.

8. Which hormone initiates the maturation of the ovarian follicle?
a. Estrogen
b. Follicle-stimulating hormone
c. Progesterone
d. Luteinizing hormone
ANS: B
Follicle-stimulating hormone (FSH) stimulates the maturation of a follicle.

9. What statement indicates a woman has correct information about oogenesis?
a. “Women make fewer ova as they age.”
b. “Women have all of their ova at the time they are born.”
c. “Ova production begins at birth and continues until puberty.”
d. “New ova are made every month from puberty to climacteric.”
ANS: B
Oogenesis (formation of immature ova) does not occur after fetal development. Females are born with about 2 million immature ova, which rapidly reduce by adulthood.
10. A pregnant woman asks the nurse, “Will I be able to have a vaginal delivery?” The nurse knows that which is the most favorable pelvic type for vaginal birth?
   a. Gynecoid
   b. Android
   c. Anthropoid
   d. Platypelloid
   ANS: A
   The gynecoid pelvis is the typical female pelvis and is most favorable for vaginal birth.

DIF: Cognitive Level: Knowledge REF: Page 25 OBJ: 8
TOP: Female Reproductive System KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

11. A mother is anxious about her ability to breastfeed after her child is born because of her small breast size. What would be an important point to teach this mother?
   a. Milk is produced in ducts and lobules regardless of breast size.
   b. Supplementing breastfeeding with formula allows the infant to receive adequate nutrition.
   c. Breast size can be increased with exercise.
   d. Drinking extra milk during pregnancy allows breasts to produce adequate amounts of milk.
   ANS: A
   Breast size does not influence the ability to secrete milk.

DIF: Cognitive Level: Comprehension REF: Page 27 OBJ: 6
TOP: Female Reproductive System KEY: Nursing Process Step: Implementation
MSC: NCLEX: Psychosocial Integrity: Psychosocial Adaptation

12. For what is the decrease in estrogen and progesterone during the menstrual cycle responsible?
   a. Degeneration of the corpus luteum
   b. Ovulation
   c. Follicle maturation
   d. Shedding of the endometrium
   ANS: D
   The fall in estrogen and progesterone causes the endometrium to break down, resulting in menstruation.

DIF: Cognitive Level: Comprehension REF: Page 27 OBJ: 9
TOP: Female Reproductive Cycle KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

13. The nurse is assisting with pelvic inlet measurements on a pregnant woman. What measurement will provide the nurse with information about whether the woman can deliver vaginally?
   a. Diagonal conjugate
   b. Obstetric conjugate
14. The nurse has explained menstruation to a 13-year-old girl. What statement indicates the girl needs additional education?
   a. “Periods last about 5 days.”
   b. “My cycle should get regular in 6 months.”
   c. “I should expect heavy bleeding with clots.”
   d. “Periods come about every 4 weeks.”
   ANS: C
   Clots are not normally seen in menstrual discharge. A normal menstrual flow is 30 to 40 mL blood and 30 to 50 mL serous fluid.

15. A mother asks the nurse, “When will I know my child has entered puberty?” What will the nurse state based on an understanding of changes associated with puberty?
   a. “Your daughter will have her first period.”
   b. “You'll recognize puberty by the mood swings.”
   c. “The child becomes interested in the opposite sex.”
   d. “Secondary sex characteristics, such as pubic hair, appear.”
   ANS: D
   Puberty begins when the secondary sex characteristics appear. Puberty ends when mature sperm are formed in the male and when regular menstrual cycles occur in the female.

16. A nurse is planning to teach couples about the physiology of the sex act. What correct information will the nurse provide?
   a. “Fertilization of an ovum requires penetration by several sperm.”
   b. “An ovum must be fertilized within 24 hours of ovulation.”
   c. “It takes 4 to 5 days for sperm to reach the fallopian tubes.”
   d. “Sperm live for only 24 hours following ejaculation.”
   ANS: B
After ovulation, the egg lives for only 24 hours. Sperm must be available during that time if fertilization is to occur.

DIF: Cognitive Level: Comprehension REF: Page 29 OBJ: 6
TOP: Physiology of the Sex Act KEY: Nursing Process Step: Planning
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

17. A newly married couple tells the nurse they would like to wait a few years before starting a family. Which statement made by the man indicates an understanding about sexual activity and pregnancy?
   a. “My wife can't get pregnant if I withdraw before climax.”
   b. “A man can secrete semen before ejaculation.”
   c. “If we don't have intercourse very often, my wife won't get pregnant.”
   d. “It is safe to ejaculate outside the vagina.”
   ANS: B
   Semen may be secreted during sexual intercourse before ejaculation.

DIF: Cognitive Level: Comprehension REF: Page 29 OBJ: 4
TOP: Male Reproductive System KEY: Nursing Process Step: Evaluation
MSC: NCLEX: Physiological Integrity: Reduction of Risk

18. The nurse is aware that the diagonal conjugate is 12 centimeters. What is the measurement in centimeters of the obstetric conjugate?
   a. 10 to 10.5
   b. 11 to 11.5
   c. 12.5 to 13
   d. 14 to 14.5
   ANS: A
   The obstetric conjugate is approximately 1.5 to 2 centimeters shorter than the diagonal conjugate.

DIF: Cognitive Level: Knowledge REF: Page 26 OBJ: 1 | 8
TOP: Obstetric Conjugate KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

19. The nurse uses a diagram to demonstrate the fimbriae when teaching nursing students about the female anatomy. What is true about fimbriae?
   a. They form the passageway for the sperm to meet the ovum.
   b. They are the site of fertilization.
   c. They are fingerlike projections that “capture” the ovum.
   d. They propel the egg through the fallopian tube.
   ANS: C
   Fimbriae are the fingerlike projections from the infundibulum that “capture” the ovum at ovulation and conduct it into the fallopian tube.
20. What will the nurse explain to a 12-year-old patient when describing what characterizes nocturnal emissions?
   a. A drop in testosterone level
   b. Sexual stimulation
   c. Absence of sperm in ejaculate
   d. Association with violent dreams
   ANS: C

   Nocturnal emissions, also known as "wet dreams," occur without sexual stimulation and contain no sperm. Testosterone levels are constant until midlife.

21. The nurse is educating a pregnant patient who expects to breastfeed. The nurse knows that when a patient breastfeeds, which portions of the breast secrete milk?
   a. Lactiferous sinuses
   b. Lobes
   c. Montgomery’s glands
   d. Alveoli
   ANS: D

   The alveoli secrete milk.

22. Where are the secretions responsible for nourishing sperm excreted from?
   a. Vas deferens
   b. Epididymis
   c. Cowper’s gland
   d. Scrotum
   ANS: C

   The Cowper’s gland secretions nourish the sperm.

23. What signifies the end of puberty for a male?
   a. Facial hair is evident.
b. Erections can be sustained.
c. Ejaculate is greater than 5 mL.
d. Mature sperm are formed.
ANS: D
Puberty ends for a male when mature sperm are formed by the testes.

DIF: Cognitive Level: Knowledge REF: Page 20 OBJ: 1 | 2
TOP: End of Puberty KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

24. How long does sperm remain viable in the female reproductive tract?
a. 12 hours  
b. 1 day  
c. 2 days  
d. 4 days  
ANS: D  
Sperm can remain viable in the reproductive tract of the female for as long as 4 to 5 days.

DIF: Cognitive Level: Knowledge REF: Page 29 OBJ: 5
TOP: Viability of Sperm KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

25. The nurse encourages the members of a prenatal class to seriously consider breastfeeding. What does breast milk provide in addition to nourishment for the infant?
a. Maternal antibodies  
b. Stimulus for red blood cell production  
c. Endorphins that soothe the infant  
d. Hormones that stimulate growth  
ANS: A  
Breast milk provides maternal antibodies to the infant that give the child acquired immunity from some diseases for several months.

DIF: Cognitive Level: Comprehension REF: Page 27 OBJ: 4
TOP: Properties of Breast Milk KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

26. A female patient reports her menstrual cycle consistently occurs every 32 days. What day of her cycle can the woman anticipate ovulation?
a. 14  
b. 16  
c. 18  
d. 20  
ANS: C  
Ovulation occurs when a mature ovum is released from the follicle about 14 days before the onset of the next menstrual period.
MULTIPLE RESPONSE

27. The nurse conducting a sex education class for junior high students describes some cultural rites celebrating the entry to adulthood. What information would the nurse include? (Select all that apply.)
   a. Bar mitzvah
   b. Displays of bravery
   c. Receiving part of their inheritance
   d. Ritual circumcision
   e. Displays of self-defense

ANS: A, B, D, E

Some cultures celebrate the entry to adulthood with rites such as displays of strength, bravery, self-reliance, and self-defense. Ritual circumcisions and bar and bat mitzvahs are also entry rites to adulthood. Lack of such rituals can sometimes confuse young people because there is no evidence of acceptance as an adult.

28. The nurse is reading a pregnant patient's history and physical. What information does the nurse recognize might indicate the need for a cesarean delivery? (Select all that apply.)
   a. History of childhood rickets
   b. Immobile coccyx
   c. Prepregnant weight of 100 pounds
   d. Avid horse rider
   e. Pelvic fracture 3 years ago

ANS: A, B, E

Pelvic conditions that may predispose to a cesarean delivery are childhood rickets, pelvic fracture, and immobile coccyx.

29. What are considered to be functions of the fallopian tubes? (Select all that apply.)
   a. Passage for sperm to meet ova
   b. Passage for ovum to uterus
   c. Safe environment for zygote
   d. Restriction for only one ovum to enter uterus
The fallopian tube provides passage for both sperm and ova, offering an optimum place for fertilization and a safe environment for the zygote.

30. The nurse is providing an inservice to students beginning their obstetric clinical rotation. Using a diagram, the nurse points out parts of the female pelvis. What will the nurse include? (Select all that apply.)
   a. Two innominates
   b. Obstetric conjugate
   c. Sacrum
   d. Perimetrium
   e. Coccyx
ANS: A, C, E
The bones of the pelvis are two innominates, the sacrum, and the coccyx.

31. The nurse explains that testosterone is responsible for males exceeding females in which aspects? (Select all that apply.)
   a. Strength
   b. Height
   c. Mental concentration
   d. Hematocrit levels
   e. Agility
ANS: A, B, D

32. A patient is being seen by her health care provider for a suspected vaginal infection. What will the nurse include when educating this patient on factors that affect the vaginal pH? (Select all that apply.)
   a. Antibiotic therapy
   b. Frequent douching
   c. Exercise
   d. Jet lag
   e. Use of vaginal sprays
ANS: A, B, E
The vagina is self-cleansing and during the reproductive years maintains a normal acidic pH of 4 to 5. The self-cleansing activity may be altered by antibiotic therapy, frequent douching, and excessive use of vaginal sprays, deodorant sanitary pads, or deodorant tampons.

DIF: Cognitive Level: Application REF: Page 23 OBJ: 7
TOP: Female Reproductive Organs KEY: Nursing Process Step: Assessment
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

COMPLETION

33. When the nurse reads in the history and physical of a pregnant patient that she has a platypelloid pelvis, the nurse is aware that this pelvis has a narrow __________ diameter, making a vaginal birth unlikely.

ANS: anteroposterior

The platypelloid pelvis is very narrow from front to back (anteroposterior). The shape of this pelvis makes vaginal delivery unlikely.

DIF: Cognitive Level: Comprehension REF: Page 25 | Page 26, Figure 2-5
OBJ: 8 TOP: Platypelloid Pelvis
KEY: Nursing Process Step: Data Collection
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

34. In males the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH) from the anterior pituitary stimulate testosterone production in the _______ cells of the testes.

ANS: Leydig

The Leydig cells in the testes are stimulated by the FSH and LH to produce testosterone.

DIF: Cognitive Level: Knowledge REF: Page 22 OBJ: 2
TOP: Leydig Cells KEY: Nursing Process Step: N/A
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

35. The ________ is a period of years during which the woman's ability to reproduce gradually declines.

ANS: climacteric

The climacteric is a period of years during which the woman's ability to reproduce gradually declines.
36. Where the labia majora and the labia minora meet is known as the fourchette or ______________________.

ANS:

obstetrical perineum

Where the labia majora and the labia minora meet is known as the fourchette or obstetrical perineum. Lacerations in this area often occur during childbirth.

37. The nurse outlines the phases of the sexual response. Arrange the phases in order of occurrence. Put a comma and space between each answer choice (a, b, c, d, etc.)

a. Nipples become erect.
b. Involuntary muscle spasms occur.
c. Engorgement resolves.
d. Heart rate slows.
e. Skin flushes.

ANS: A, E, B, C, D