Chapter 2: Human Reproductive Anatomy and Physiology

MULTIPLE CHOICE

1. A 14-year-old boy is at the pediatric clinic for a checkup. The nurse is aware that the production of testosterone is responsible for which physical change in males during puberty?
   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: 21 OBJ: 2
   TOP: Male Reproductive System KEY: Nursing Process Step: Assessment
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

2. The nurse explains that the structure(s) responsible for production of sperm and secretion of hormones is (are) the:
   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: 20 OBJ: 2
   TOP: Male Reproductive System KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

3. The nurse, speaking with a couple trying to conceive a child, reminds the patients that a factor that can decrease sperm production is:
   a. Infrequent sexual intercourse
   b. The man is not circumcised
   c. The penis and testes are small
   d. The testes are too warm

   ANS: D
   The scrotum is suspended away from the perineum to lower the temperature of the testes for sperm production.

   DIF: Cognitive Level: Comprehension REF: 21 OBJ: 2
   TOP: Male Reproductive System KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Physiological Integrity: Reduction of Risk

4. When explaining the female reproductive tract to a pregnant woman, the nurse would refer to the uterine layer that is involved in implantation as the:
   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 cyclic hormonal changes. It is functional during menstruation and during the implantation of a fertilized ovum.

   DIF: Cognitive Level: Knowledge REF: 23 OBJ: 6
   TOP: Female Reproductive System KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

5. A group of nursing students plan to teach a class of 6th-grade girls about menstruation. They would teach them that:
   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.

   DIF: Cognitive Level: Application REF: 26 OBJ: 8
   TOP: Female Reproductive Cycle and Menstruation
   KEY: Nursing Process Step: Planning
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

6. A 10-year-old girl asks the nurse, ”What is the first sign of puberty?” The correct nursing response is:
   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.

   DIF: Cognitive Level: Application REF: 26 OBJ: 2
   TOP: Puberty-Female KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

7. Maturation of the ovarian follicle is initiated by which of the following hormones?
   a. Estrogen

b. Follicle-stimulating hormone
c. Progesterone
d. Luteinizing hormone

ANS: B
Follicle stimulating hormone (FSH) stimulates the maturation of a follicle.

DIF: Cognitive Level: Knowledge REF: 26 OBJ: 8
TOP: Female Reproductive Cycle KEY: Nursing Process Step: N/A
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

8. The statement which indicates a woman has correct information about oogenesis is:
a. "Women make less 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.

DIF: Cognitive Level: Analysis REF: 24 OBJ: 8
TOP: Female Reproductive Cycle KEY: Nursing Process Step: Evaluation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

9. A pregnant woman asks the nurse, "Will I be able to have a vaginal delivery?" The nurse would base a response on the understanding that the pelvic type most favorable for vaginal birth is:
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: Analysis REF: 25 OBJ: 9
TOP: Female Reproductive System KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

10. A mother is anxious about her ability to breastfeed after her child is born because of her small breast size. An important point to teach her is that:
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: Application REF: 26 OBJ: 7
TOP: Female Reproductive System KEY: Nursing Process Step: Implementation
MSC: NCLEX: Psychosocial Integrity: Psychosocial Adaptation

11. The nurse explains that the decrease in estrogen and progesterone during the menstrual cycle is responsible for:
    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: 28 OBJ: 8
    TOP: Female Reproductive Cycle KEY: Nursing Process Step: Implementation
    MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

12. The nurse, assisting with pelvic inlet measurements on a pregnant woman, is aware the that the measurement that provides information about whether on not the woman can deliver vaginally is:
    a. Diagonal conjugate
    b. Obstetrical conjugate
    c. Transverse diameter
    d. Anteroposterior diameter

    ANS: B
    This measurement determines if the fetus can pass through the birth canal.

    DIF: Cognitive Level: Analysis REF: 25 OBJ: 9
    TOP: Female Reproductive System KEY: Nursing Process Step: Implementation
    MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

13. The nurse has explained menstruation to a 13-year-old girl. The statement that indicates the girl needs additional education is:
    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.

    DIF: Cognitive Level: Comprehension REF: 28 OBJ: 8
    TOP: Female Reproductive Cycle KEY: Nursing Process Step: Evaluation

MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

14. A mother asks the nurse, "When will I know my child has entered puberty?" Based on an understanding of changes associated with puberty, the nurse states:
    a. "When your daughter has 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."

    DIF: Cognitive Level: Application REF: 19-20 OBJ: 2
    TOP: Puberty KEY: Nursing Process Step: Implementation
    MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

15. When planning to teach couples about the physiology of the sex act, the nurse would include:
    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
    Following 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: 26 OBJ: N/A
    TOP: Physiology of the Sex Act KEY: Nursing Process Step: Planning
    MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

16. A newly married couple tell the nurse they would like to wait a few years before starting a family. The statement made by the man that indicates an understanding about sexual activity and pregnancy is:
    a. "My wife can't get pregnant if I withdraw before a 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: 28 OBJ: 3
    TOP: Male Reproductive System KEY: Nursing Process Step: Evaluation
    MSC: NCLEX: Health Physiological Integrity: Reduction of Risk

17. The nurse who is aware that the diagonal conjugate is 12 cm knows that the obstetrical conjugate is:
    a. 10 to 10.5 cm

b. 11 to 11.5 cm
c. 12.5 to 13 cm
d. 14 to14.5 cm

ANS: A
The obstetrical conjugate is approximately 1.5 to 2 cm less that the diagonal conjugate.

DIF: Cognitive Level: Application REF: 25 OBJ: 7
TOP: Obstetrical Conjugate KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

18. The nurse uses a diagram to demonstrate the fimbriae that:
a. Are the passage way for the sperm to meet the ovum.
b. Is the site of fertilization.
c. Are fingerlike projections that "capture" the ovum.
d. 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.

DIF: Cognitive Level: Comprehension REF: 24 OBJ: 7
TOP: Fimbriae KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

19. The nurse explains to a 12-year-old patient that nocturnal emissions (wet dreams) are characterized by:
a. A drop in testosterone level
b. Sexual stimulation
c. No sperm in ejaculate
d. Association with violent dreams

ANS: C
Nocturnal emissions occur without sexual stimulation and contain no sperm. Testosterone levels are constant until midlife.

DIF: Cognitive Level: Comprehension REF: 19 OBJ: 5
TOP: Nocturnal Emissions KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

20. The nurse explains to a pregnant patient who expects to breastfeed that the portions of the breast that secrete milk are the:
a. Lactiferous sinuses
b. Lobes
c. Montgomery's glands
d. Alveoli

ANS: D
The alveoli secrete milk.

DIF: Cognitive Level: Knowledge REF: 26 OBJ: 7
TOP: Milk Secretion KEY: Nursing Process Step: Implementation
MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

21. The nurse explains that the sperm are nourished by secretions from the:
    a. Vas deferens
    b. Epididymis
    c. Cowper's glands
    d. Scrotum

    ANS: C
    The Cowper's gland secretions nourish the sperm.

    DIF: Cognitive Level: Knowledge REF: 21 OBJ: 7
    TOP: Cowper's Gland KEY: Nursing Process Step: Implementation
    MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

MULTIPLE RESPONSE

1. The nurse conducting a sex education class for junior high students describes some cultural rites celebrating the entry to adulthood, such as:
   Select all that apply.
   a. Bar mitzvah
   b. Displays of bravery
   c. Hunting wild animals
   d. Ritual circumcision
   e. Displays of self-defense

   ANS: A, B, C, 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.

   DIF: Cognitive Level: Knowledge REF: 19 OBJ: 2
   TOP: Rites of Passage KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

2. The nurse, by reading a pregnant patient's history and physical, recognizes information that might indicate the need for a cesarean delivery, which is/are:
   Select all that apply:
   a. History of childhood rickets
   b. Immobile coccyx
   c. Prepregnant weight of 100 pounds
   d. Patient is avid horseman
   e. Pelvic fracture 3 years ago

   ANS: A, B, E
   Pelvic conditions that might predispose to a cesarean delivery are childhood rickets, pelvic fracture, and immobile coccyx.

DIF: Cognitive Level: Analysis REF: 26 OBJ: 9
TOP: Pelvic Conditions Predisposing Cesarean Delivery
KEY: Nursing Process Step: Assessment
MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection of Disease

3. The nurse explains that the functions of the fallopian tubes are to provide:
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
   e. Site for fertilization

   ANS: A, B, C, E
   The fallopian tube provides passage for both sperm and ova, offering an optimum place for fertilization and a safe environment for the zygote.

   DIF: Cognitive Level: Comprehension REF: 24 OBJ: 7
   TOP: Function of Fallopian Tubes KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

4. The nurse uses a diagram to show the bones of the pelvis. They include:
Select all that apply.
   a. Two innominates
   b. Obstetrical conjugate
   c. Sacrum
   d. Perimetrium
   e. Coccyx

   ANS: A, B, E
   The bones of the pelvis are 2 innominates, the sacrum, and the coccyx.

   DIF: Cognitive Level: Comprehension REF: 24 OBJ: 9
   TOP: Bones of the Pelvis KEY: Nursing Process Step: Implementation
   MSC: NCLEX: Health Promotion and Maintenance: Growth and Development

COMPLETION

1. 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: anterioposterior

   DIF: Cognitive Level: Comprehension REF: 24, Figure 2-5
   OBJ: 9 TOP: Platypelloid Pelvis
   KEY: Nursing Process Step: Assessment

MSC: NCLEX: Health Promotion and Maintenance: Prevention and Early Detection
NOT: Rationale: The platypelloid pelvis is very narrow from front to back (anteroposterior). The shape of this pelvis makes vaginal delivery unlikely.