Multiple-Choice Questions

1) The reproductive system
A) produces and transports gametes.
B) stores and nourishes gametes.
C) produces FSH and LH.
D) A and B only
E) all of the above
Answer: D
Diff: 1
Learning Outcome: 19.1
Skill Level: 1 Reviewing Facts and Terms

2) The urinary system is exclusive to the
A) gonads.
B) ducts that receive and transport the gametes.
C) accessory glands and organs that secrete fluids.
D) external genitalia.
E) female urethra.
Answer: E
Diff: 1
Learning Outcome: 19.1
Skill Level: 1 Reviewing Facts and Terms

3) Sperm cells are stored primarily in the
A) seminiferous tubules.
B) straight tubules.
C) lobules.
D) interstitial areas.
E) epididymis.
Answer: E
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms
4) Straight tubules originate at the seminiferous tubules and form a maze of passageways called the
A) epididymis.
B) ductus deferens.
C) rete testis.
D) efferent ducts.
E) ejaculatory ducts.
Answer: C
Diff: 1
Learning Outcome:  19.2
Skill Level:  1 Reviewing Facts and Terms

5) The spermatic cord is
A) a bundle of tissue that contains the ductus deferens and the blood vessels, nerves, and lymphatics that
serve the testis.
B) a narrow opening that links the scrotal chamber with the peritoneal cavity.
C) the external marking of the boundary between the two chambers of the scrotum.
D) a layer of smooth muscle in the skin of the scrotal sac.
E) a dense layer of connective tissue that surrounds the testis.
Answer: A
Diff: 1
Learning Outcome:  19.2
Skill Level:  1 Reviewing Facts and Terms

6) Undifferentiated spermatogenic cells are called
A) spermatogonia.
B) spermatids.
C) primary spermatocytes.
D) secondary spermatocytes.
E) sperm.
Answer: A
Diff: 1
Learning Outcome:  19.2
Skill Level:  1 Reviewing Facts and Terms

7) Interstitial cells produce
A) sperm.
B) FSH.
C) nutrients.
D) testosterone.
E) androgen-inhibiting protein.
Answer: D
Diff: 1
Learning Outcome:  19.2
Skill Level:  1 Reviewing Facts and Terms
8) Sperm production occurs in the
A) ductus deferens.
B) seminiferous tubules.
C) epididymis.
D) seminal vesicles.
E) rete testis.
Answer: B
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

9) The hormone responsible for a male's secondary sexual characteristics is
A) testosterone.
B) ICSH.
C) FSH.
D) LH.
E) gonadotropin.
Answer: A
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

10) The stage of development prior to a developing sperm beginning spermiogenesis is
A) spermatogonia.
B) secondary spermatocytes.
C) spermatids.
D) spermatozoans.
E) nurse cells.
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

11) ________ are formed at the end of meiosis.
A) Spermatogonia
B) Primary spermatocytes
C) Spermatids
D) Secondary spermatocytes
E) Spermatozoa
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms
12) Sperm are moved along the ductus deferens by
A) hydrostatic force.
B) ciliary action.
C) peristaltic contractions.
D) suction.
E) guide cells.
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

13) The structure that stores sperm is the
A) ductus deferens.
B) epididymis.
C) seminal vesicle.
D) ejaculatory duct.
E) corpus spongiosum.
Answer: B
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

14) The tubular gland that produces a secretion that contains fructose, is slightly alkaline, and contributes about 60 percent to the volume of the semen is the
A) prostate gland.
B) bulbourethral gland.
C) seminal vesicle.
D) corpus cavernosum.
E) prenuptial gland.
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

15) The small, paired glands at the base of the penis that produce a lubricating secretion are the
A) seminal vesicles.
B) prostate glands.
C) prenuptial glands.
D) Bartholin’s glands.
E) bulbourethral glands.
Answer: E
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms
16) Semen contains  
A) spermatozoans.  
B) seminal fluid.  
C) nutrients.  
D) enzymes.  
E) all of the above  
Answer: E  
Diff: 1  
Learning Outcome:  19.2  
Skill Level:  1 Reviewing Facts and Terms

17) The paired erectile tissues of the penis are the  
A) glans penis.  
B) prepuce.  
C) corpus spongiosum.  
D) corpora cavernosa.  
E) penile urethra.  
Answer: D  
Diff: 1  
Learning Outcome:  19.2  
Skill Level:  1 Reviewing Facts and Terms

18) The portion of erectile tissue that surrounds the urethra is the  
A) prepuce.  
B) glans.  
C) corpus spongiosum.  
D) corpora cavernosa.  
E) corona glandis.  
Answer: C  
Diff: 1  
Learning Outcome:  19.2  
Skill Level:  1 Reviewing Facts and Terms

19) The erectile tissue that is located on the dorsal surface of the penis is the  
A) membranous urethra.  
B) penile urethra.  
C) corpus spongiosum.  
D) corpora cavernosa.  
E) prepuce.  
Answer: D  
Diff: 1  
Learning Outcome:  19.2  
Skill Level:  1 Reviewing Facts and Terms
20) The scrotum is
A) the male organ of copulation.
B) the site of sperm production.
C) erectile tissue of the penis.
D) responsible for temperature control of the testes.
E) superior to the glans penis.
Answer: D
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

21) The role of the pituitary hormone LH in males is to
A) stimulate the interstitial cells to produce testosterone.
B) stimulate the sustentacular cells to produce inhibin.
C) initiate sperm production in the testes.
D) develop and maintain secondary sex characteristics.
E) influence sexual behaviors and sex drive.
Answer: A
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

22) The pituitary hormone that stimulates spermatogenesis is
A) FSH.
B) LH.
C) ACTH.
D) ADH.
E) GH.
Answer: A
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

23) How many spermatozoa are produced during spermatogenesis?
A) one
B) two
C) four
D) six
E) eight
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms
24) The muscle in the wall of the scrotum is the
A) cremaster muscle.
B) scrotus externus muscle.
C) dartos muscle.
D) all of the above
E) none of the above
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

25) Contraction of the dartos muscle
A) occurs when the testes are too cool.
B) produces an erection.
C) propels sperm through the urethra.
D) moves sperm through the ductus deferens.
E) moves the testes closer to the body cavity.
Answer: A
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

26) Major functions of the accessory glands of the male reproductive system include
A) activating the spermatozoa.
B) providing nutrients spermatozoa need for motility.
C) propelling spermatozoa and fluids along the reproductive tract.
D) producing buffers.
E) all of the above
Answer: E
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms
27) The following is a list of structures of the male reproductive tract.
1. ductus deferens
2. urethra
3. ejaculatory duct
4. epididymis

The order in which sperm pass through these structures from the testes to the penis is
A) 1, 3, 4, 2.
B) 4, 3, 1, 2.
C) 4, 1, 2, 3.
D) 4, 1, 3, 2.
E) 1, 4, 3, 2.
Answer: D
Diff: 2
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

28) Removal of the seminal glands would result in semen
A) that lacked sperm.
B) with a lower-than-normal pH.
C) with less fructose.
D) with no lubricating fluids.
E) that lacked androgens.
Answer: C
Diff: 1
Learning Outcome: 19.2
Skill Level: 2 Reviewing Concepts

29) Sperm cannot fertilize an egg unless they have been in the female reproductive tract for several hours. This enhanced ability of the sperm to fertilize the ovum is called capacitation. In vitro studies indicate that the sperm can fertilize the ovum if they are first washed before being introduced to the ovum. These observations suggest that
A) the process of capacitation involves the removal of some inhibiting substance or substances from the sperm.
B) the process of capacitation is temperature dependent.
C) in capacitation, secretions of the female reproductive tract are taken up by the sperm.
D) pH is an important factor in the process of capacitation.
E) only sperm that come into contact with vaginal secretions are capable of fertilizing an ovum.
Answer: A
Diff: 1
Learning Outcome: 19.2
Skill Level: 3 Critical Thinking & Clinical Applications
30) ________ is characterized by failure of the testes to descend into the scrotum at the time of birth.
   A) Impotence
   B) Cryptorchidism
   C) Sterility
   D) Incontinence
   E) Erectile dysfunction
   Answer: B
   Diff: 1
   Learning Outcome: 19.2
   Skill Level: 3 Critical Thinking & Clinical Applications

31) Currently, this type of cancer is the second most common cancer in males, and it is the second leading cause of cancer deaths in men.
   A) prostate cancer
   B) testicular cancer
   C) lung cancer
   D) penile cancer
   E) bone cancer
   Answer: A
   Diff: 1
   Learning Outcome: 19.2
   Skill Level: 3 Critical Thinking & Clinical Applications

32) Long-term compression of the spermatic artery and vein could result in
   A) decreased blood flow to the testes.
   B) decreased blood levels of testosterone.
   C) sterility.
   D) impotence.
   E) all of the above
   Answer: E
   Diff: 2
   Learning Outcome: 19.2
   Skill Level: 3 Critical Thinking & Clinical Applications

33) The female structure that corresponds to the male penis is the
   A) vagina.
   B) clitoris.
   C) vestibule.
   D) labia minora.
   E) labia majora.
   Answer: B
   Diff: 1
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms
34) The hormone responsible for the development and maintenance of female secondary sexual characteristics is
   A) estrogen.
   B) progesterone.
   C) LH.
   D) FSH.
   E) gonadotropin.
   Answer: A
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms

35) About the time of ovulation, the anterior pituitary releases a large quantity of
   A) gonadotropins.
   B) FSH.
   C) LH.
   D) estrogen.
   E) progesterone.
   Answer: C
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms

36) The tubular portion of the uterus that extends downward into the upper portion of the vagina is the
   A) urethra.
   B) ejaculatory duct.
   C) cervix.
   D) perimetrium.
   E) isthmus.
   Answer: C
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms

37) The hormones responsible for maintaining the uterine wall during the second and third trimesters are
   A) FSH and LH.
   B) placental lactogens.
   C) hCG and LH.
   D) placental estrogen and progesterone.
   E) none of the above
   Answer: D
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms
38) The hormone oxytocin aids in the birth process by stimulating
A) the functional maturation of sperm.
B) fetal muscular movements.
C) uterine wall contractions.
D) an increase in estrogen secretion.
E) all of the above
Answer: C 
Diff: 1
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms 

39) During pregnancy,
A) progesterone causes the ductile system of the mammary glands to grow.
B) estrogen stimulates the development of milk-producing glands.
C) milk production is inhibited by prolactin.
D) LH causes normal regeneration of the uterine lining.
E) none of the above
Answer: E 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms

40) The organ that provides mechanical protection and nutritional support for the developing embryo is the
A) vagina.
B) uterine tube.
C) ovary.
D) uterus.
E) cervix.
Answer: D 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms

41) The superior portion of the vagina that surrounds the cervix is the
A) isthmus.
B) fornix.
C) fundus.
D) body.
E) os.
Answer: B 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms
42) The most commonly prescribed oral contraceptives use
A) synthetic androgens.
B) gonadotropins.
C) synthetic estrogen and progesterone.
D) FSH and LH.
E) LH.
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

43) The vagina
A) serves as a passageway for the elimination of menstrual fluids.
B) receives the penis during coitus.
C) holds spermatozoa prior to their passage to the uterus.
D) forms the lower portion of the birth canal.
E) all of the above
Answer: E
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

44) The vestibule is
A) a central space surrounded by the labia minora.
B) the inner lining of the uterus.
C) the inferior portion of the uterus.
D) a muscular tube extending between the uterus and the external genitalia.
E) a tube that carries ova from the ovary to the uterus.
Answer: A
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

45) Which of the following is an unpaired structure?
A) ovaries
B) labia majora
C) labia minora
D) clitoris
E) uterine tube
Answer: D
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms
46) In the mammary glands, milk production occurs in the
A) lobes.
B) lobules.
C) lactiferous ducts.
D) lactiferous sinuses.
E) all of the above
Answer: B
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

47) The anterior enlargement of erectile tissue in females is the
A) fornix.
B) vestibule.
C) hymen.
D) clitoris.
E) isthmus.
Answer: D
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

48) Which of the following is an unpaired structure?
A) vas deferens
B) seminal vesicle
C) prostate gland
D) bulbourethral gland
E) corpus cavernosa
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

49) The clitoris is a
A) thin epithelial fold that partially or completely blocks the entrance to the vagina.
B) fleshy fold that encircles the vestibule.
C) mound of fat that is superior to the pubis.
D) mass of erectile tissue located at the anterior margin of the labia minora.
E) shallow recess that surrounds the cervical portion of the vagina.
Answer: D
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms
50) The generally dark, pigmented skin that surrounds the nipple is called the  
A) clitoris. 
B) fornix. 
C) zona pellucida. 
D) hymen. 
E) areola. 
Answer: E 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms 

51) The cell commonly called the egg, or ovum, is more correctly called the  
A) oocyte. 
B) oogonia. 
C) primary oocyte. 
D) secondary oocyte. 
E) zygote. 
Answer: D 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms 

52) The process of oogenesis produces ________ viable ovum/ova.  
A) one 
B) two 
C) three 
D) four 
E) eight 
Answer: A 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms 

53) Fertilization normally occurs in the  
A) fallopian tube. 
B) uterus. 
C) peritoneal cavity. 
D) vagina. 
E) vas deferens. 
Answer: A 
Diff: 1 
Learning Outcome: 19.3 
Skill Level: 1 Reviewing Facts and Terms
54) The average length of the menstrual cycle is ________ days.
A) 10
B) 14
C) 21
D) 28
E) 35
Answer: D
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

55) During the secretory phase of the uterine (menstrual) cycle,
A) ovulation occurs.
B) a new functional layer is formed in the uterus.
C) secretory glands and blood vessels develop in the endometrium.
D) the old functional layer is sloughed off.
E) the corpus luteum is formed.
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

56) The hormone commonly measured in a pregnancy test is
A) estrogen.
B) progesterone.
C) hCG.
D) FSH.
E) LH.
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

57) The principal hormone secreted by the corpus luteum is
A) LH.
B) FSH.
C) progesterone.
D) estradiol.
E) estrogen.
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms
58) At puberty in both sexes,
A) levels of FSH and LH increase.
B) gametogenesis begins.
C) secondary sex characteristics begin to appear and a sex drive develops.
D) A and C only
E) all of the above
Answer: E
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

59) Female athletes sometimes experience disturbances in their menstrual cycles due to
A) increased testosterone.
B) increased estrogen.
C) decreased testosterone.
D) decreased estrogen.
E) increased progesterone.
Answer: D
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

60) Which of the following is the smaller amount?
A) the number of primordial follicles in the female ovaries at birth
B) the number of primordial follicles in the female ovaries at puberty
Answer: B
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

61) The phase of the uterine cycle prior to ovulation is the _________ phase.
A) preovulatory
B) secretory
C) proliferative
D) puerperal
E) meiosis
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 2 Reviewing Concepts
62) Just prior to menses,
A) ovulation occurs.
B) a new uterine lining is formed.
C) secretory glands and blood vessels develop in the endometrium.
D) estrogen and progesterone levels drop rapidly.
E) the corpus luteum is formed.
Answer: D
Diff: 1
Learning Outcome: 19.3
Skill Level: 2 Reviewing Concepts

63) The increase in FSH that occurs during the first half of the ovarian cycle triggers
A) follicle maturation.
B) menstruation.
C) ovulation.
D) menopause.
E) pregnancy.
Answer: A
Diff: 1
Learning Outcome: 19.3
Skill Level: 2 Reviewing Concepts

64) Pelvic inflammatory disease
A) is frequently caused by sexually transmitted pathogens.
B) causes fever and abdominal pain.
C) can cause sterility.
D) can possibly lead to peritonitis.
E) all of the above
Answer: E
Diff: 1
Learning Outcome: 19.3
Skill Level: 3 Critical Thinking & Clinical Applications

65) Marissa is an avid jogger and she trains incessantly. She has slimmed down so that she is now underweight for her height and has very little fat tissue. You would expect Marissa to
A) have heavy menstrual flows.
B) double ovulate.
C) be amenorrheic (have no monthly menstrual flow).
D) have painful menstrual cramps.
E) show elevated levels of FSH.
Answer: C
Diff: 1
Learning Outcome: 19.3
Skill Level: 3 Critical Thinking & Clinical Applications
66) The clinical term for inflammation of the ovary is
A) glomerulonephritis.
B) testicular hypertrophy.
C) prostatitis.
D) nephritis.
E) follicular hypertrophy.
Answer: E
Diff: 1
Learning Outcome: 19.3
Skill Level: 3 Critical Thinking & Clinical Applications

67) Cessation of the normal adult menstrual cycle for six months or more is termed
A) dysfunction.
B) amenorrhea.
C) menarche.
D) puberty.
E) dysmenorrhea.
Answer: B
Diff: 1
Learning Outcome: 19.3
Skill Level: 3 Critical Thinking & Clinical Applications

68) Identify the notable risk factor(s) associated with breast cancer.
A) family history
B) poor diet
C) pregnancy after age 30
D) early menarche
E) A, C, and D
Answer: E
Diff: 1
Learning Outcome: 19.3
Skill Level: 3 Critical Thinking & Clinical Applications

69) Emission
A) occurs under parasympathetic stimulation.
B) begins with peristaltic contractions of the vas deferens.
C) is responsible for propelling spermatozoa into the female reproductive tract.
D) involves contractions of the cremaster muscle.
E) all of the above
Answer: B
Diff: 1
Learning Outcome: 19.4
Skill Level: 1 Reviewing Facts and Terms
70) The process of emission is under the control of
   A) the parasympathetic nervous system.
   B) the sympathetic nervous system.
   C) both the parasympathetic and sympathetic nervous systems.
   Answer: B
   Diff: 1
   Learning Outcome: 19.4
   Skill Level: 2 Reviewing Concepts

71) The process of arousal is under the control of
   A) the parasympathetic nervous system.
   B) the sympathetic nervous system.
   C) both the parasympathetic and sympathetic nervous systems.
   Answer: A
   Diff: 1
   Learning Outcome: 19.4
   Skill Level: 2 Reviewing Concepts

72) For erection and ejaculation to occur,
   A) there must be sufficient blood hydrostatic pressure leading to erectile tissue.
   B) the parasympathetic and sympathetic branches of the nervous system must be properly functioning.
   C) the urinary sphincters must be closed.
   D) A and B only
   E) all of the above
   Answer: E
   Diff: 1
   Learning Outcome: 19.4
   Skill Level: 2 Reviewing Concepts

73) In response to parasympathetic stimulation,
   A) vessels in the penis dilate.
   B) blood flow increases to the erectile tissue.
   C) vascular channels in the erectile tissue become engorged with blood.
   D) erection occurs.
   E) all of the above
   Answer: A
   Diff: 1
   Learning Outcome: 19.4
   Skill Level: 2 Reviewing Concepts
74) The organism responsible for 50 percent to 80 percent of pelvic inflammatory disease (PID) infections is
A) Chlamydia trachomatis.
B) Ureaplasma urealyticum.
C) Chlamydia psittaci.
D) Neisseria gonorrhoeae.
E) Neisseria meningitides.
Answer: D
Diff: 1
Learning Outcome: 19.4
Skill Level: 3 Critical Thinking & Clinical Applications

75) Currently, another probable cause of up to 50 percent of all cases of pelvic inflammatory disease (PID) involves this genus of microorganism.
A) Chlamydia
B) Streptococcus
C) Mycobacterium
D) Lactobacillus
E) Staphylococcus
Answer: A
Diff: 1
Learning Outcome: 19.4
Skill Level: 3 Critical Thinking & Clinical Applications

76) The most common forms of sexually transmitted diseases include
A) syphilis, AIDS, Bordetella, and herpes.
B) hepatitis, herpes, pneumonia, and warts.
C) gonorrhea, syphilis, herpes, and chancroid.
D) warts, HIV, herpes, and vibriosis.
E) syphilis, anthrax, gonorrhea, and tularemia.
Answer: C
Diff: 1
Learning Outcome: 19.4
Skill Level: 3 Critical Thinking & Clinical Applications

77) During the male climacteric,
A) sperm production ceases.
B) the penis shrinks.
C) FSH and LH levels rise.
D) sex drive increases.
E) all of the above
Answer: C
Diff: 1
Learning Outcome: 19.5
Skill Level: 1 Reviewing Facts and Terms
78) The surgical technique used to sterilize a male is termed
A) tubal ligation.
B) spermatoectomy.
C) penile barrier.
D) vasectomy.
E) none of the above
Answer: D
Diff: 1
Learning Outcome: 19.6
Skill Level: 3 Critical Thinking & Clinical Applications

79) This birth control strategy interferes with the female hormonal cycle so that ovulation does not occur.
A) vaginal barrier
B) intrauterine device (IUD)
C) rhythm method
D) diaphragm
E) oral contraceptives
Answer: E
Diff: 1
Learning Outcome: 19.6
Skill Level: 3 Critical Thinking & Clinical Applications

Matching Questions

1) Match the hormone in the first column with its primary effect in the second column.
   _____ 1. estrogen  A. maintains secondary sex characteristics
   _____ 2. inhibin   B. stimulates interstitial cells
   _____ 3. androgen  C. inhibits secretion of FSH
   _____ 4. luteinizing hormone D. stimulates LH secretion
   _____ 5. gonadotropin-releasing hormone  E. stimulates FSH secretion
Answer: 1-D, 2-C, 3-A, 4-B, 5-E
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms
Fill in the Blank Questions

1) The female gonad is called a(n) _________________________.
   Answer: ovary
   Learning Outcome: 19.1
   Skill Level: 1 Reviewing Facts and Terms

2) The primary organs of the male reproductive system are the _________________________.
   Answer: testes
   Learning Outcome: 19.1
   Skill Level: 1 Reviewing Facts and Terms

3) Sperm cells are produced by the process of _________________________.
   Answer: spermatogenesis or spermiogenesis
   Learning Outcome: 19.2
   Skill Level: 1 Reviewing Facts and Terms

4) The _________________________ of the sperm contains the flagellum.
   Answer: tail
   Learning Outcome: 19.2
   Skill Level: 1 Reviewing Facts and Terms

5) The secretion of the seminal vesicles contain _________________________, which provides an energy source for sperm.
   Answer: fructose
   Learning Outcome: 19.2
   Skill Level: 1 Reviewing Facts and Terms

6) To become active, motile, and fully functional, sperm cells must undergo the process of _________________________.
   Answer: capacitation
   Learning Outcome: 19.2
   Skill Level: 1 Reviewing Facts and Terms

7) The portion of the male urethra that passes through the penis is the _________________________.
   Answer: penile
   Learning Outcome: 19.2
   Skill Level: 1 Reviewing Facts and Terms
8) The procedure in which the prepuce is removed from the penis is called _________________.
Answer: circumcision
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

9) As a group, sex hormones are classified as _________________.
Answer: steroid
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

10) The cellular process in which chromosome number is reduced is called _________________.
Answer: meiosis
Diff: 1
Learning Outcome: 19.2
Skill Level: 1 Reviewing Facts and Terms

11) The primary organs of the female reproductive system are the _________________.
Answer: ovaries
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

12) The ________________ are finger-like projections at the end of the uterine tube.
Answer: fimbriae
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

13) The first spermatogenic cell to have only 23 chromosomes is the _________________.
Answer: spermatid
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

14) The internal orifice connects the uterine cavity to the ________________ cavity.
Answer: cervical
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms
15) The space within the uterus is called the _______________________.  
Answer: uterine cavity  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

16) The inner lining of the uterus is called the _______________________.  
Answer: endometrium  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

17) The shallow recess that surrounds the cervical protrusion into the vagina is called the _______________________.  
Answer: fornix  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

18) If hCG is does not signal the corpus luteum to persist, it becomes scar tissue know as the _______________________.  
Answer: corpus albicans  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

19) The _________________________ is a layer of follicle cells that surrounds the oocyte after ovulation.  
Answer: corona radiata  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

20) The first fluid to be secreted by the mammary glands following birth of an infant is called _______________________.  
Answer: colostrum  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

21) The _________________________ is a thin epithelial fold that partially or completely blocks the entrance to the vagina.  
Answer: hymen  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms
22) _________________________ are mucous glands near the vaginal entrance that resemble the bulbourethral glands of the male.
Answer: Greater vestibular glands
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

23) The _________________________ is a small conical projection where ducts of the mammary glands open onto the body surface.
Answer: nipple
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

24) The onset of menstruation at puberty is called _________________________.
Answer: menarche
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

25) The cessation of menstruation that occurs during midlife is called _________________________.
Answer: menopause
Diff: 1
Learning Outcome: 19.4
Skill Level: 1 Reviewing Facts and Terms

Essay Questions

1) Jerry is in an automobile accident that severs his spinal cord at the L3 level. After his recovery, he wonders if he will still be able to have an erection. What would you tell him?
Answer: Yes, he would still be able to have an erection. Erection is primarily controlled by a parasympathetic reflex that is controlled by the sacral region of the spinal cord (inferior to the injury). Tactile stimulation of the penis would initiate the parasympathetic reflex that controls erection. He would also be able to experience an erection by a sympathetic route, since this would be controlled in the T12 to L2 area of the cord (superior to the injury). Stimulation by higher centers could produce a decreased sympathetic tone in the vessels to the penis, resulting in an erection.
Diff: 2
Learning Outcome: 19.4
Skill Level: 3 Critical Thinking & Clinical Applications
Labeling Exercises

The Components of the Female Reproductive System

Using the figure above, identify the labeled part.

1) Label A: ________
   Answer: Ovary
   Diff: 1
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms

2) Label B: ________
   Answer: Uterine tube/fallopian tube
   Diff: 1
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms

3) Label C: ________
   Answer: Urinary bladder
   Diff: 1
   Learning Outcome: 19.3
   Skill Level: 1 Reviewing Facts and Terms
4) Label D: ________
Answer: Pubic symphysis
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

5) Label E: ________
Answer: Urethra
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

6) Label F: ________
Answer: Greater vestibular gland
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

7) Label G: ________
Answer: Clitoris
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

8) Label H: ________
Answer: Labium minus
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

9) Label I: ________
Answer: Labium majus
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

10) Label J: ________
Answer: Anus
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

11) Label K: ________
Answer: Rectum
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

12) Label L: ________
Answer: Vagina
Diff: 1
Learning Outcome: 19.3
Skill Level: 1 Reviewing Facts and Terms

13) Label M: ________
Answer: Cervix
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

14) Label N: ________  
Answer: Fornix  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

15) Label O: ________  
Answer: Sigmoid colon  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms

16) Label P: ________  
Answer: Uterus  
Diff: 1  
Learning Outcome: 19.3  
Skill Level: 1 Reviewing Facts and Terms