MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of the following hormones controls the release of anterior pituitary gonadotropins?
   A) LH
   B) FSH
   C) GnRH
   D) testosterone

2) Development of male reproductive structures depends on which of the following events?
   A) that the female hormones are suppressed during pregnancy
   B) the suppression of inhibin
   C) secretion of male hormones prenataally and lasting into the first few months after birth
   D) that human gonadotropin be synthesized in the first week of the pregnancy

3) The primary function of the uterus is to:
   A) protect the ovaries.
   B) synthesize female hormones.
   C) regulate the ovarian and menstrual cycles.
   D) receive, retain, and nourish a fertilized ovum.

4) Human egg and sperm are similar in that:
   A) about the same number of each is produced per month.
   B) they have the same degree of motility.
   C) they have the same number of chromosomes.
   D) they are about the same size.

5) The constancy of the chromosome number from one cell generation to the next is maintained through:
   A) mitosis.
   B) meiosis.
   C) cytokinesis.
   D) DNA synthesis.

6) Fertilization generally occurs in the:
   A) ovary.
   B) uterus.
   C) vagina.
   D) fallopian tubes.

7) Spermiogenesis involves:
   A) the formation of four haploid cells from a spermatogonium.
   B) the movement of sperm in the female genital tract.
   C) the formation of a functional sperm by the stripping away of superfluous cytoplasm.
   D) the sequence of events in the seminiferous tubules.

8) All of the following can be considered male secondary sex characteristics except the:
   A) development of body hair.
   B) lowering of the voice.
   C) development of testes as opposed to ovaries.
D) increasing mass of the skeleton.

9) Functions of testosterone include:
A) facilitation of muscle and skeletal growth in mass.
B) loss of facial hair.
C) growth of the breasts.
D) drying of the skin.

10) Effects of estrogen include:
A) increased oiliness of the skin.
B) deepening of the voice.
C) growth of the breasts at puberty.
D) growth of the larynx.

11) Secretion of progesterone stimulates:
A) contraction of uterine muscles.
B) preparation of the mammary glands for lactation.
C) secretory activity of the uterine myometrium.
D) development of the female secondary sex characteristics.

12) The cells that produce testosterone in the testis are called:
A) spermatocytes.
B) spermatogonia.
C) sustentacular cells.
D) interstitial cells.

13) The testicular cells that construct the blood-testis barrier are the:
A) spermatocytes.
B) spermatogonia.
C) sustentacular cells.
D) interstitial cells.

14) Erection of the penis results from:
A) a sympathetic reflex.
B) parasympathetic activation of the bulbourethral glands.
C) dilation of the veins in the penis.
D) a spinal reflex mediated by the parasympathetic nervous system.

15) Which is not a part of the proliferative phase of the female menstrual cycle?
A) cervical mucus becomes thin and crystalline
B) ovulation
C) corpus luteum
D) development of endometrial cells

16) During the secretory phase of the menstrual cycle:
A) LH reaches its highest levels.
B) progesterone levels are at their highest.
C) estrogen reaches its highest levels.
D) the Graafian follicle forms.

17) Select the correct statement about the uterine cycle.
A) The menstrual phase of the cycle is from day 1 to day 8.
B) During the secretory phase, estrogen levels are at their highest.
C) During the proliferative phase, levels of progesterone rise as the follicle begins to produce more hormone.
D) If fertilization occurs, the corpus luteum is maintained by a hormone secreted by the developing embryo.

18) Normally menstruation occurs when:
A) blood levels of FSH fall off.
B) blood levels of estrogen and progesterone decrease.
C) blood levels of estrogen and progesterone increase.
D) the corpus luteum secretes estrogen.

19) The basic difference between spermatogenesis and oogenesis is that:
A) during spermatogenesis two more polar bodies are produced.
B) the mature ovum is n, while the sperm is 2n.
C) in oogenesis, one mature ovum is produced, and in spermatogenesis four mature sperm are produced from the parent cell.
D) spermatogenesis involves mitosis and meiosis, but oogenesis involves meiosis only.

20) Which of the following will occur after ovulation?
A) The corpus luteum secretes estrogen only.
B) The endometrium enters its secretory phase.
C) The secretion of anterior pituitary gonadotropins is enhanced.
D) The corpus luteum prepares to become a corpus albicans.

21) Spermatogenesis:
A) is the process of releasing mature sperm cells into the lumen of the seminiferous tubule.
B) involves a kind of cell division limited to the gametes.
C) results in the formation of diploid cells.
D) uses mitosis to produce gamete cells.

22) Select the correct statement about testosterone control.
A) GnRh from the hypothalamus causes FSH and LH release from the anterior pituitary.
B) FSH stimulates testicular production of testosterone.
C) Inhibin and testosterone exert positive feedback on the hypothalamus and pituitary.
D) The pineal gland is believed to be the gland that exerts the most influence in testosterone control.

23) Select the correct statement about the hormonal events of the ovarian cycle.
A) Rising levels of estrogen start follicle development.
B) High estrogen levels result in a surge of LH release.
C) The follicle begins to secrete progesterone in response to estrogen stimulation.
D) The LH surge stimulates further development of the secondary oocyte.

24) Which of these statements about sexually transmitted diseases is false?
A) Chlamydia is caused by bacteria that can bring on a wide variety of nonfatal but uncomfortable symptoms.
B) Gonorrhea is caused by a bacteria that can bring on very painful discharges.
C) Syphilis is caused by a virus that may lead to death if untreated.
D) Genital herpes is caused by a virus that may lead to cervical cancer.

25) Which of the following statements about the female reproductive process is not true?
A) Fertilization usually occurs in the fallopian tube.
B) Ovulation usually occurs 14 days after the beginning of menses.
C) Rebuilding the endometrium is under the control of prolactin.
D) The monthly discharge of the uterus (menses) is initiated by the decrease in secretion of female hormones.

26) All of the following statements referring to the uterine cycle are true except:
A) FSH and LH directly promote development of the uterine endometrium.
B) Estrogen is secreted by the developing follicle in the follicular phase of the cycle.
C) The corpus luteum is formed from the ruptured follicle after ovulation.
D) A decrease in the levels of ovarian hormones signals menstruation.

Birth control in females by surgical sterilization generally involves cutting and tying the cut ends of the ________
A) endometrium
B) urethra
C) ovaries
D) uterus
E) Fallopian tubes (oviduct)

The tube through which sperm passes from the epididymis to the penis is known as the __________.
A. seminiferous tubule
B. urethra
C. prostate
D. corpus cavernosa
E. vas deferens

For fertilization to occur, sperm are deposited in the female __________, then enter the ________ through the opening known as the __________, and travel to the ____________, the site of zygote formation.
A. vagina, cervix, oviduct, uterus
B. cervix, vagina, uterus, oviduct
C. uterus, vagina, cervix, oviduct
D. vagina, oviduct, cervix, uterus
E. vagina, uterus, cervix, oviduct

Sperm are stored in the __________, ascend into the __________ prior to ejaculation, and are discharged from the penis through the __________.
A. seminiferous tubules, prostate gland, vas deferens.
B. epididymis, vas deferens, urethra.
C. epididymis, epididymis, urethra.
D. epididymis, prostate gland, urethra.
E. vas deferens, urethra, erectile tissue.

In a "typical" 28 day female reproductive cycle, on which day following the beginning of the menstrual period is the level of luteinizing hormone most likely to be highest?
A. day 5  
B. day 7  
C. day 14  
D. day 21  
E. day 28

Which of the following is unique to mitosis and not a part of meiosis?
A. the number of chromosomes is halved  
B. homologous chromosomes cross over  
C. chromatids are separated during anaphase  
D. homologous chromosomes behave independently

_________________ most closely resembles events of mitosis except that the cells are ____________.
A. interphase, diploid  
B. meiosis II, diploid  
C. interphase, haploid  
D. meiosis II, haploid