5. Which hormone is responsible for increased musculature and body hair?
   A. estrogen
   B. testosterone
   C. follicle-stimulating hormone (FSH)
   D. human chorionic gonadotropin (HCG)
   
   Source: August 2002

6. Where is follicle-stimulating hormone (FSH) produced?
   A. follicle
   B. hypothalamus
   C. corpus luteum
   D. anterior pituitary
   
   Source: August 2002

7. On which day of a typical 28-day menstrual cycle will luteinizing hormone (LH) be the highest?
   A. day 2
   B. day 7
   C. day 13
   D. day 28
   
   Source: June 2003

8. What is the function of the structure labelled X?
   A. It stores urine.
   B. It matures ova before ovulation.
   C. It receives the penis during copulation.
   D. It is the site of embryonic development.
   
   Source: November 2002
11. Which of the following substances stimulates uterine contractions?
   A. estrogen and calcium
   B. oxytocin and prostaglandins
   C. progesterone and human chorionic gonadotropin (HCG)
   D. acrosomal enzymes and follicle-stimulating hormone (FSH)

12. What is one result of an embryo failing to implant in the endometrium?
   A. the degeneration of the corpus luteum
   B. an increased production of progesterone
   C. the release of human chorionic gonadotropin (HCG)
   D. a decreased production of follicle-stimulating hormone (FSH)

13. Spermatogenesis occurs in the
    A. interstitial cells.
    B. seminal vesicles.
    C. seminiferous tubules.
    D. ductus (vas) deferens.

14. All of the following have a similar function except for the
    A. prostate gland.
    B. Cowper’s gland.
    C. seminal vesicles.
    D. seminiferous tubules.

15. Where do sperm mature?
    A. epididymis
    B. interstitial cells
    C. seminal vesicles
    D. ductus (vas) deferens
16. What is represented by the structure labelled W?
   A. the ovary
   B. the uterus
   C. the vagina
   D. the oviduct

17. Which labelled structure secretes hormones that cause the changes that occur in the female body during puberty?
   A. W
   B. X
   C. Y
   D. Z

18. Which of the following is the correct order of structures through which sperm pass as they leave the body?
   A. epididymis → urethra → vas deferens → seminiferous tubules
   B. epididymis → urethra → seminiferous tubules → vas deferens
   C. seminiferous tubules → urethra → vas deferens → epididymis
   D. seminiferous tubules → epididymis → vas deferens → urethra

19. In what structure is the corpus luteum found?
   A. the uterus
   B. the ovary
   C. the clitoris
   D. the oviduct

20. What would be an effect of high estrogen concentrations in the female?
   A. The placenta would begin to develop.
   B. The follicle would increase the release of its secretions.
   C. The corpus luteum would reduce the release of progesterone.
   D. The anterior pituitary would reduce the release of follicle-stimulating hormone.

21. What would occur as a result of structure X releasing hormones?
   A. Ovulation would occur.
   B. The follicle would mature.
   C. Estrogen secretion would increase.
   D. The endometrium would become secretory.

22. Which of the following would result if fructose was not present in seminal fluid?
   A. Sperm would be less motile.
   B. Semen would become acidic.
   C. Less sperm would be produced.
   D. Less testosterone would be secreted.

23. Reduced secretions from which structure would result in decreased breast development?
   A. the endometrium
   B. the interstitial cells
   C. the anterior pituitary
   D. the posterior pituitary
Which of the following is a function of estrogen?

A. to initiate menstruation
B. to stimulate the posterior pituitary gland
C. to cause maturation of the corpus luteum
D. to initiate the growth of the endometrium

Which of the following correctly describes the pathway sperm follow from their formation to their exit from the body?

A. U → Y → W → T
B. S → Z → W → X
C. S → Z → X → Y
D. S → Z → V → T

Which of the following is a function of the secretions from the structure labelled S?

A. to buffer the pH of the semen
B. to cause breast growth at puberty
C. to cause rhythmic contractions of the uterus
D. to cause increased secretion of releasing hormones

Structure X refers to which of the following?

A. the testes
B. the epididymis
C. the vas deferens
D. the seminal vesicles

What occurs when hormones are released by the corpus luteum?

A. Menstruation begins.
B. The uterine lining thickens.
C. The secretion of releasing hormones increases.
D. The production of human chorionic gonadotropin (HCG) decreases.

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**Written Response**

Use the following diagram to answer question 1

![Diagram](image)

1) a) Identify each of the following.
   (2 marks: 1 mark each)

   hormone X: LH
   hormone Y: FSH

b) Describe the effect of hormone X on the female reproductive system during days 15 to 28 of a 28-day cycle.
   (2 marks)

2) Identify the source of follicle-stimulating hormone (FSH) in males and describe its effect on the testes.
   (2 marks)

   source: anterior pituitary gland
   effect: stimulates sperm

3) Give one function of each of the following hormones.
   (3 marks: 1 mark each)

   testosterone: primary sex organs, deepening voice, mass
   progesterone: uterine lining thickening
   oxytocin: uterine contractions during childbirth

Desired response: prolactin increases

Desired response: testosterone is in the blood.