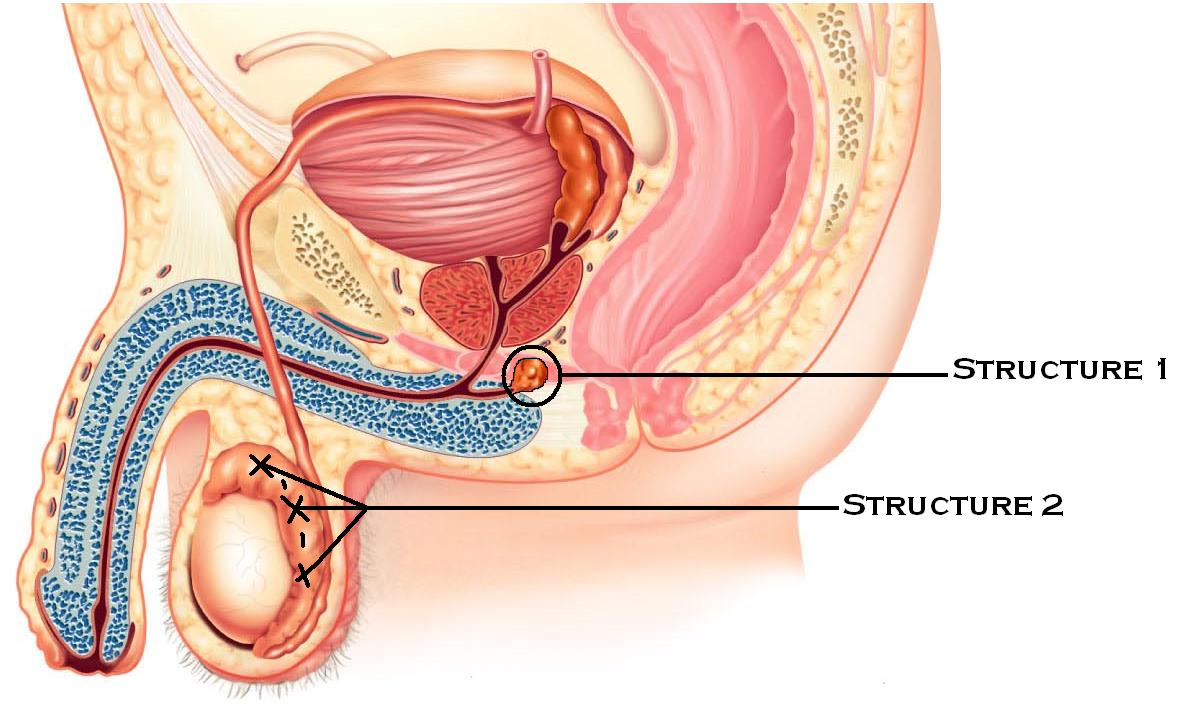
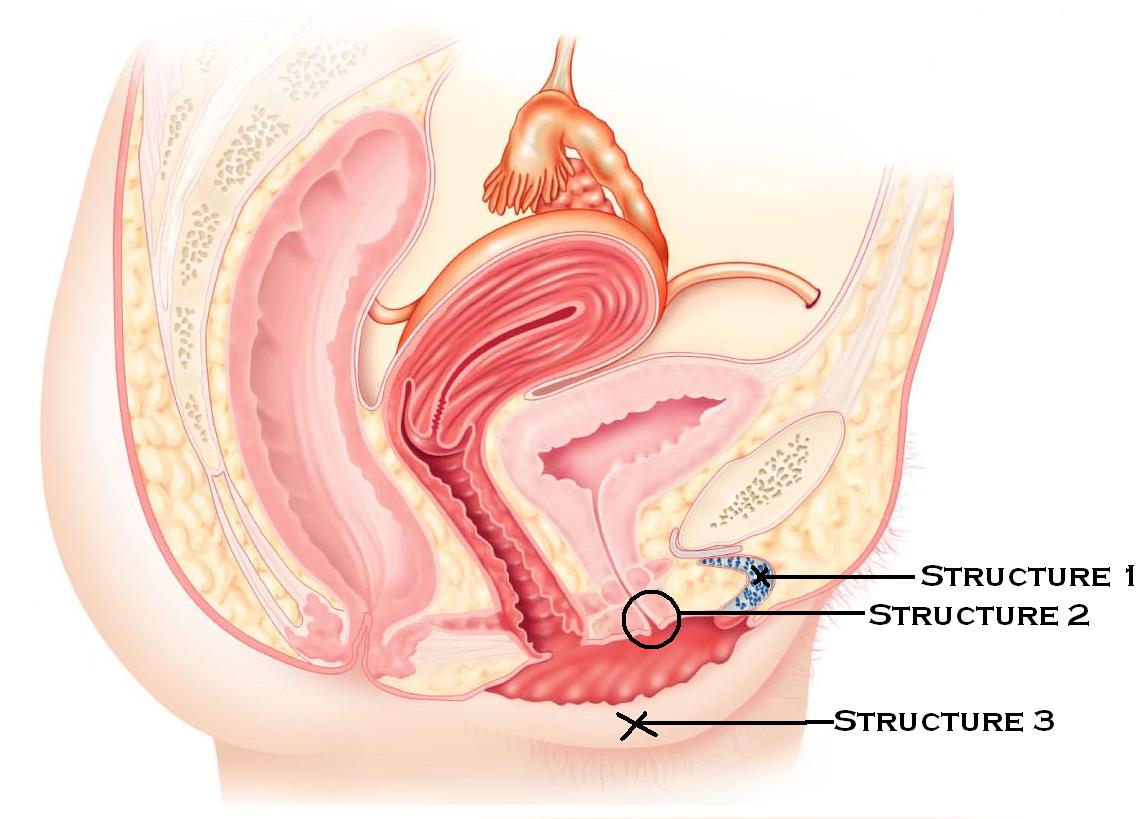
**BSC 182**

**Exam Six**

1. The location of the testes in a male **fetus** at 8½ months is
   1. In the scrotum
   2. In the abdomen
   3. In the pelvic cavity
   4. In the retroperitoneal cavity
   5. In the penile cavity
2. Sperm are produced in the testes. What is the name of the **undifferentiated cell** from which they come?
   1. Spermatogenesis
   2. Semenologues
   3. Spermatids
   4. Spermatagonia
   5. Spermatozoa
3. The seminal **vesicle secretions**
   * 1. are acid fluid
     2. are alkaline fluid
     3. Contain fructose
     4. Contain estrogen
     5. Will stimulate female musculature to contract
4. 1, 3, 5
5. 2, 3
6. 3, 4, 5
7. 2, 3, 5
8. 1, 2, 4
9. The Bulbourethral gland secretions
   1. Lubricates the end of the penis
   2. are a thin milky fluid
   3. Neutralizes the acidity of the vagina
   4. Is only found in females
   5. Protect and nourishes the sperm
10. What is **capacitation**
    1. The sperm head detaches from the mid-piece and tail.
    2. The acrosome releases enzymes
    3. The mitochondria give energy to the zona pellucida
    4. The sperm tail detaches from the mid-piece and head
    5. The acrosome releases starches
11. Which are **correct** with regards to the penis
    * 1. Composed of a pair of corpora spongiosa
      2. Composed of a single corpora spongiosa
      3. Composed of a pair of corpora cavernosa
      4. Composed of a single cavernosa
12. 1 and 3
13. 2 and 3
14. 1 and 4
15. 2 and 4
16. 3 and 4
17. GnRH Gonadotropin releasing hormone
    1. Released from the hypothalamus
    2. Released from the anterior pituitary
    3. Released from the interstitial cells
    4. Released from the follicle
    5. Directly causes the release of estrogen
18. Which statement about **meiosis** and its events is **false**?
    1. during prophase the nuclear membrane disappears
    2. during metaphase I the chromosomes pair up along the metaphase plate
    3. there are half as many chromosomes involved in a metaphase II cell as there were in metaphase I
    4. telophase restores the nucleus and allows the chromosomes to relax back into chromatin
    5. the daughter cells are identical to the parent cell
19. How does the hormone Inhibin help control the amount of testosterone secreted?
    1. Encourages the production of relaxin
    2. Prevents the sustentacular cells from releasing testosterone
    3. Prevents the posterior pituitary gland from releasing FSH and LH
    4. Prevents the hypothalamus from releasing Gonadotropin Releasing Hormone
    5. Causes Androgen Binding Protein to block testosterone binding sites.
20. Which of the statements are true regarding testosterone
    * 1. Testosterone is produced at the anterior pituitary
      2. Testosterone is produced at the interstitial cells
      3. Testosterone is produced in response to GHRH
      4. Testosterone is transported in the blood
      5. Testosterone is the least abundant androgen
21. 1 and 2
22. 2 and 3
23. 3 and 4
24. 1 and 5
25. 2 and 4
26. In the ovary, the follicles develop
    1. In the ovarian cortex
    2. In the ovarian medulla
    3. In the ovarian ampulla
    4. In the ovarian pyramids
    5. In the tunica albuginea
27. Ovulation is
    1. The development of the mature follicle
    2. The release of the oocyte from the follicle in the ovary
    3. The secretion of high levels of progesterone
    4. The uterus sloughing its lining
    5. The oocyte completing the second meiotic division



1. Identify Structure 1
   1. prostate gland
   2. ejaculatory duct
   3. seminal vesicle
   4. epididymis
   5. bulbouretheral gland
2. Identify Structure 2
   1. glans penis
   2. ovary
   3. vas deferens
   4. epididymis
   5. seminal vesicle
3. Which structure is located within the **vestibule**?
   1. Seminal glands
   2. Fornix
   3. Mons pubis
   4. External os
   5. Urethral opening
4. Which of these is **NOT** correct with regards to the female orgasm?
   1. The vaginal canal engorges with blood and elongates
   2. Muscles of the perineum contract
   3. Muscles of the uterus contract
   4. Muscle contractions prevent sperm from traveling through the reproductive tract.
   5. Orgasm is not essential for fertilization to take place
5. In an **non-pregnant** female, most of the **estrogen** comes from
   1. Follicle
   2. Anterior pituitary
   3. uterus
   4. Cervix
   5. Fallopian tube
6. Identify **Structure** **1**
   1. Pubis symphysis
   2. labia minora
   3. labia majora
   4. clitoris
   5. cowpers gland
7. Identify **Structure** **2**
   1. Vestibular gland
   2. clitoris
   3. external urethral orifice
   4. labia majora
   5. hymen
8. Identify **Structure** **3**
   1. Mons pubis
   2. clitoris
   3. labia minora
   4. labia majora
   5. external os
9. Which structures are **analogous** (homologous tissues) in **male and female** systems
   * 1. Penis and ovary
     2. Testes and ovaries
     3. Clitoris and glans penis
     4. Labia majora and scrotum
     5. Seminiferous tubule and fallopian tube
10. 1, 3, 5
11. 2, 4, 5
12. 2, 4
13. 2, 3, 4
14. 1, 4
15. The onset of the first menstrual cycle is
    1. Menarche
    2. Menorrhagia
    3. Menstruation
    4. Menopause
    5. Magical
16. Assuming an average 28 day cycle, on approximately which day of a woman’s cycle will the **follicle become mature**?
    1. Day One
    2. Day Eight
    3. Day Fourteen
    4. Day Twenty one
    5. Day Twenty eight
17. Which of the following structures allows the penile urethra to remain open while the penis is in its erect state?
    1. corpora spongiosum
    2. corpora cavernosum
    3. crura
    4. tunica albugenia
    5. tunica vaginalis
18. The abundance of which hormone will cause the release of the egg?
    1. Estrogen
    2. Inhibin
    3. Progesterone
    4. Relaxin
    5. Luteinizing Hormone
19. The function of the corpus luteum is
    1. To continue the secretion of LH and FSH
    2. To continue the secretion of Estrogen and progesterone
    3. The corpus luteum has no hormonal secretions
    4. To surround and protect the developing oocyte
    5. To continue the secretion of ICSH and testosterone
20. Assume a female has a 28 day menstrual cycle and ovulates at the midpoint. Given what you know about the life span of the sperm, which day might intercourse lead to fertilization?

a. Day 5

1. Day 12
2. Day 18
3. Day 24
4. It would not be possible for fertilization to occur for any of those dates
5. The hormone responsible for causing the **endometrium** to become more vascular and more glandular is
   1. Prolactin
   2. FSH
   3. LH
   4. ICSH
   5. Progesterone
6. Which **skeletal muscle** is responsible for the **elevating the scrotum**?
   1. Dartos muscle
   2. Cremaster muscle
   3. Cowpers muscle
   4. Detrussor muscle
   5. urogenital muscle
7. Which hormonal events lead to the shedding of the uttering lining?
   1. Increase of LH
   2. Increase of Estrogen
   3. Decrease of testosterone
   4. Increase of progesterone
   5. Decrease of estrogen and progesterone
8. Days 6-12 of the **uterine cycle** are referred to as
   1. proliferative phase
   2. follicular phase
   3. luteal phase
   4. secretory phase
   5. endometrial phase
9. Which structure is formed in the **first week** following fertilization
   1. Margola
   2. Morula
   3. Amyloplast
   4. gametophyte
   5. Plastocyte
10. One of the functions of HCG Human chorionic Gonadotropin is
    1. To promote glandular development of the breast
    2. To promote uterine contractions
    3. To transition the corpus luteum into the corpus albicans
    4. To maintain the corpus luteum, allowing estrogen and progesterone production
    5. To encourage development of a new follicle
11. Brandeen and Cletus are in their early 20s and sexually active. Cletus has begun to complain of a pus-like discharge from his penis. He also complains that it is painful to urinate. Brandeen has no vaginal discharge or discomfort, although she suspects she has a urinary tract infection. Which of the following statements are true.
    * 1. Cletus has syphilis and Brandeen is healthy
      2. They both show symptoms for Chlamydia
      3. Treating Cletus with an anti-viral medication will help his condition
      4. They both show symptoms for Gonorrhea
      5. They should both be treated with antibiotics and checked for other STDs
12. 3 and 4
13. 2 and 3
14. 1 and 3
15. 3 and 5
16. 4 and 5
17. Which of the following is a true statement?
    1. The stratum functionalis is fed by the spiral arteries
    2. The stratum germinativum is fed by the straight arteries
    3. The stratum basalis is the part of the endometrial lining that is shed on a monthly basis
    4. The stratum corneum is the part of the endometrial lining that is shed on a monthly basis
    5. The Arcuate arteries supply the stratum germinativum
18. Which hormone helps to promote **ligamentous laxity** (allows the ligaments to be somewhat stretchy) in a pregnant female?
    1. Estrogen
    2. Progesterone
    3. Inhibin
    4. Relaxin
    5. Chillin
19. At what week does **parturition** take place?
    1. Week Four
    2. Week Eight
    3. Week Twenty
    4. Week Forty
    5. Week Eighty
20. Peter and Richard are in the locker room comparing penile lesions (don’t ask). Peter notes that his lesions appear to look like blisters while Richard’s lesions are red, firm, and painless. With this information, indicate which statements are correct.
    * + 1. Both Peter and Richard should be treated with an antiviral
        2. Both Peter’s and Richard’s lesions will disappear without treatment
        3. Peter has Gonorrhea while Richard has HPV
        4. Richard has syphilis and Peter has herpes
        5. Neither of them is any danger to their partner(s).
    1. 2 and 3
    2. 1 and 2
    3. 2 and 4
    4. 1 and 3
    5. 4 and 5
21. Which is true with regards to the breasts?
    1. Estrogen causes the ducts to grow
    2. Progesterone stimulates the glands
    3. Prolactin stimulates milk secretion
    4. Oxytocin stimulates milk release
    5. All are correct
22. With endometriosis
    1. The risk of infertility increases
    2. ovarian tissue grows on the cervix
    3. cervical tissue grows on the fallopian tubes
    4. it is considered a STD and can be passed to male or female partners
    5. Pap smears are used to reveal progression of the disorder
23. In the male, the genital tubercle gives rise to the \_\_\_\_, while in the female, it gives rise to the \_\_\_\_
    1. penis; vagina
    2. penis; clitoris
    3. scrotum; labia majora
    4. urethra; vestibule
    5. testis; ovary
24. Which is **false** regarding the **placenta**?
    1. Maternal contribution comes from the endometrium
    2. Embryonic contribution comes from the trophoblasts
    3. It is fully functional by three months
    4. It is considered a temporary organ
    5. Allows the mother’s blood to be distributed to the emybryonic tissues.
25. Which of the embryonic membranes will form part of the digestive system?
    1. allantois
    2. amnion
    3. yolk sac
    4. chorionic villi
    5. hypoblastic
26. Which **two** heart structures of the fetus are no longer need beyond birth and will close?
    * 1. Right atrium
      2. Placenta
      3. Foramen ovale
      4. Interventricular septum
      5. Ductus arteriosus
27. 3 and 5
28. 4 and 5
29. 2 and 3
30. 1 and 4
31. 3 and 4
32. Chadwick’s sign
    1. Is pain during sexual activity
    2. Is an inverted nipple
    3. Is a prolapsed uterus
    4. Is a purple hue to the vagina during pregnancy
    5. Is weak uterine contractions towards the end of pregnancy
33. Missy is nine months pregnant and has begun to have strong contractions. She’s begun to have an urge to push, and her partner times the contractions at 3 minutes apart.
    1. Missy is in the effacement stage of labor
    2. Missy is in the dilation stage of labor
    3. Missy is experiencing Braxton-Hicks contractions
    4. Missy is in the expulsion stage of labor
    5. Missy is in the involution stage of labor
34. Which components can be found in semen?
    * 1. pituitary secretions
      2. prostate secretions
      3. hypothalamic secretions
      4. sperm
      5. seminal vesicle secretions
      6. bulbouretheral secretions
35. 1, 3, 5
36. 2, 4, 5, 6
37. 1, 3, 4, 6
38. 2, 4, 6
39. 2, 3, 4, 5
40. Janine experiences discomfort and pain in the days leading up to her period. Her condition improves the once her period begins. Based on this limited information, she most likely has
    1. Pelvic Inflammatory disease
    2. Pre-Menstrual syndrome
    3. Dysmenorrhea
    4. Mittelschmerz
    5. Chlamydia
41. Allantois
    1. Is one of the embryonic membranes that will become the structural base for the umbilical cord
    2. Is responsible for embryonic hematapoesis
    3. Produces large amounts of testosterone
    4. Produces embryonic Cerebrospinal Fluid
    5. Increases maternal metabolism
42. Which event is NOT evaluated by the APGAR score?
    1. breathing
    2. hearing
    3. coloration
    4. muscle tone
    5. reflexes

**Just can’t get enough?**

The following page has a few more questions from earlier in the semester. These are **purely extra credit** and will go towards your lecture grade; they are not linked to your exam six grade. Each correctly answered question is worth 1 point.

**Grades**: I will try to have your exams graded in the next few days and your scores posted on Blackboard. You will be able to find your exam six score as well as your class grade there.

51. **Target cells** for the releasing hormones (CRH, GnRH, etc) are in the

1. hypothalamus
2. thyroid gland
3. thymus
4. anterior pituitary gland
5. posterior pituitary gland

52. A steroid hormone acts on a target cell by

1. promoting phagocytosis
2. directly causing protein synthesis
3. diminishing mitotic control
4. causing a second messenger to be formed
5. causing the cell to divide

53. Indicate which **two options** represent arterial blood pressure

1. diastolic over systolic
2. systolic over diastolic
3. the pressure of ventricular contraction over ventricular relaxation
4. the pressure of ventricular relaxation over ventricular contraction
5. has nothing to do with ventricular contraction or relaxation
   1. 2 and 3
   2. 3 and 4
   3. 1 and 3
   4. 1 and 4
   5. 5 only

54. Which type of circulatory shock occurs when the blood volume is normal and is not related to heart damage?

* 1. Hypervolemic shock
  2. Intrinsic shock
  3. Vascular shock
  4. Cardiogenic shock
  5. Hypovolemic shock

55. Skeletal muscle contraction aids in lymph movement by

a. Causing a decrease in interstitial pressure

b. resulting in the release of epinephrine which results in lympho-constriction

c. increasing heart rate

d. decreasing abdominal pressure and increasing thoracic pressure

e. causing pressure to be placed on the lymph vessels, squeezing lymph from one valved section to the next.

56. Mononucleosis is a great example of a cell mediated response because

a. our infected B cells attack our T cells

b. our plasma cells release antibodies against our infected B cells

c. our T cells attack our infected B cells

d. our NK cells attack our Helper T cells

e. mononucleosis does not demonstrate any kind on cell mediated responses.

57. \_\_\_\_\_\_\_\_\_\_ is the amount of air able to be forced out following the deepest inspiration possible.

1. residual volume
2. inspiratory capacity
3. tidal volume
4. inspiratory reserve volume
5. vital capacity

58. In a scenario where the **pH** of the blood has begun to **drop**, the bicarbonate buffer system will do what to correct it?

* 1. Dissociate carbonic acid to release H+ and bicarbonate ions
  2. Produce more bicarbonate ions
  3. Remove carbon dioxide by transporting it into neighboring cells
  4. Bind excess H+ with bicarbonate ions to form carbonic acid
  5. The buffer system will not be able to handle shifts in pH and the renal system will be the first route for correction.

59. Pepsinogen is an inactive protein-digesting enzyme. What two things will change it from pepsinogen into pepsin?

* + - 1. Pepsinogen
      2. Pepsin
      3. Hydrochloric acid
      4. Gastric lipase
      5. Intrinsic factor

1. 1 and 5
2. 2 and 3
3. 4 and 5
4. 1 and 2
5. 3 and 4

60. Which organ’s secretion result in a **decrease** **of acidity** (causes pH to rise) in the small intestine?

1. Stomach
2. Liver
3. Gall bladder
4. Pancreas
5. Large intestine

Turn in opscan

Turn in Exam

**Congratulations on getting through the semester! You’ve done a lot of hard work and should be pleased with your achievements. I truly enjoyed having you as a class. Have a great break, and best of luck in your future endeavors!**

**~Dr. Wargo**