Multiple Choice Questions (95 questions total)

1. The kidneys receive ______ percent of the cardiac output.
   A. 10  B. 15  C. 20  D. 25  E. 30

2. Which structure is not found in the hilum of the kidney?
   A. renal pelvis  B. renal artery  C. renal vein  D. collecting ducts  E. all of the above are found in the hilum of the kidney.

3. There are 1 million ____ per kidney, and they are called the structural and functional unit of the kidney.
   A. trigones  B. podocytes  C. calyces  D. nephrons  E. glomeruli

4. Estrogen secreting cells of the ovary are found in the:
   A. antrum  B. theca interna  C. theca externa  D. corpus luteum  E. corpus albicans

5. The ureters enter the urinary bladder from the:
   A. anterior, superior surface  B. posterior, inferior surface  C. posterior, superior  D. anterior, inferior surface  E. lateral, inferior

6. The urinary bladder is lined with ________________ epithelium
   A. transitional  B. stratified squamous  C. simple columnar  D. simple squamous  E. stratified cuboidal

7. Incontinence means
   A. unable to urinate  B. normal elimination of urine  C. lack of control of urination  D. unable to produce urine  E. none of the above

8. The external urethral sphincter is formed by:
   A. smooth muscle in the wall of the bladder  B. smooth muscle in the wall of the urethra  C. skeletal muscle of the urogenital diaphragm  D. skeletal muscle in the wall of the bladder  E. smooth and skeletal muscle in the wall of the bladder

9. The epithelium which lines most of the respiratory tract is called:
   A. simple squamous  B. stratified squamous  C. transitional  D. simple cuboidal  E. pseudostratified columnar with cilia and goblet cells

14. Which of the following arteries are found at the junction between the cortex and medulla of the kidney?
   A. interlobular  B. arcuate  C. interlobar  D. segmental  E. renal

15. The blood capillaries involved in making a filtrate of blood in the kidneys are collectively called:
   A. podocytes  B. the glomerulus  C. Bowman’s capillaries  D. nephrons  E. sinusoids

16. The renal vein drains into the:
   A. abdominal aorta  B. hepatic portal vein  C. common iliac veins  D. inferior vena cava  E. thoracic duct
17. The juxtaglomerular apparatus is an association of modified cells in the______ and the________.
   A. arcuate artery, nephron       B. efferent arteriole, PCT
   C. afferent arteriole, DCT       D. loop of Henle, DCT
   E. renal artery, minor calyx

18. The male urethra lies within which portion of the penis?
   A. vesicular           B. corpus cavernosum     C. corpus spongiosum
   D. bulbourethra        E. prostate

19. Which of the following is NOT one of the 4 basic tissue types?
   A. adipose       B. connective tissue     C. epithelium    D. muscle  E. nervous

20. FSH and LH are released from the:
   A. hypophalamus      B. pineal       C. thalamus     D. pituitary    E. ovary

21. Testosterone is produced by the:
   A. Leydig cells    B. pituitary       C. Epididymus    D. Sertoli cells E. hypothalamus

22. A section that separates the body into right and left portions would be a
   A. frontal section   B. transverse section    C. coronal section
   D. sagittal section  E. horizontal section

23. Which of the following structures is lined with simple cuboidal epithelium?
   A. kidney tubules       B. inside of blood vessels  C. lining body cavities
   D. lining the trachea    E. none of the above

24. The sternal angle is:
   A. upper portion of the manubrium   B. the point of articulation of the 1st rib
   C. between the body and the xiphoid D. the inferior border of the xiphoid
   E. between the manubrium and body

25. This muscle causes a wrinkling of the skin of the scrotum
   A. testicularis    B. epididymys         C. cremaster    D. dartos
   E. vastus deferensis

26. ABP is a hormone produced by the:
   A. Leydig cells    B. pituitary       C. Epididymus    D. Sertoli cells E. hypothalamus

27. Micturition is:
   A. childbirth         B. voiding of feces  C. voiding of urine
   D. hiccuping          E. vomiting

28. The function of goblet cells is to:
   A. produce urine         B. produce surfactant  C. produce mucus
   D. produce vomit        E. produce amylase

29. Seminal vesicles contribute which of the following to semen?
   A. mucus           B. glucose         C. amylase     D. vitamin C
   E. none of the above

30. Spermatogonia:
   A. are haploid cells    B. mature in the epididymus     C. have a tail
   D. A and C only         E. none of the above
31. Urine passing from the kidneys to the bladder via the ureters moves:
A. passively, as a result of gravity  
B. actively, as a result of gravity  
C. passively, due to contraction of smooth muscle in the walls of the ureters  
D. actively, due to contraction of smooth muscle in the walls of the ureters  
E. passively, as a result of gravity, but only when the bladder is empty

32. In females, the urinary bladder is located
A. posterior to the pubic symphysis  
B. between the clitoris and the vagina  
C. anterior to the vagina  
D. all of the above  
E. none of the above

33. Which portion of the male urethra passes through the urogenital diaphragm?
A. prostatic  
B. membranous  
C. spongy  
D. cavernous  
E. seminiferous

34. The parietal layer of Bowman's capsule contains what type of epithelium?
A. simple cuboidal  
B. simple squamous  
C. simple columnar  
D. podocytes  
E. endothelium

35. Glomeruli are located in the _______ of the kidney while loops of Henle are located primarily in the _________.
A. hilum; cortex  
B. hilum; medulla  
C. cortex; hilum  
D. medulla; hilum  
E. cortex; medulla

36. The proximal convoluted tubules of the nephron are lined with simple cuboidal epithelium with microvilli. The function of the microvilli is:
A. move filtrate through the tubules  
B. increase the surface area of epithelial cells  
C. allow for increased absorption  
D. A and C are correct  
E. B and C are correct

37. Which portion of the male urethra passes through the urogenital diaphragm?
A. prostatic  
B. membranous  
C. spongy  
D. cavernous  
E. seminiferous

38. Ligaments connect ____________, while tendons connect ____________.
A. muscle to bone; bone to muscle  
B. muscle to muscle; bone to bone  
C. bone to muscle; muscle to bone  
D. bone to bone; muscle to bone  
E. bone to bone; muscle to muscle

39. How many thoracic vertebrae does a normal individual have?
A. five  
B. seven  
C. nine  
D. twelve  
E. fourteen

40. The internal urethral sphincter is made up of:
A. skeletal muscle  
B. the urogenital diaphragm  
C. smooth muscle  
D. both A and B  
E. all of the above

41. The first branch off the segmental arteries of the kidney are the__________ arteries
A. renal  
B. interlobular  
C. afferent  
D. interlobar  
E. glomerular

42. Blood capillaries found within the medullary pyramids of the kidney are called__________.
A. glomerular capillaries  
B. peritubular capillaries  
C. Bowman’s capillaries  
D. fenestrated capillaries  
E. vasa recta

43. The renal pelvis is lined with ________ epithelium
A. transitional  
B. simple cuboidal  
C. simple squamous  
D. simple cuboidal with microvilli  
E. stratified squamous
44. The two _____ openings and the _____ opening form a structure known as the urinary trigone.
   A. urethral; ureter       B. bladder; ureter       C. ureter; urethral
   D. cervical; vaginal     E. fallopian; urethral

45. The male ______ gland(s) is(are) located posterior to the bladder.
   A. prostate       B. seminal vesicle       C. seminiferous
   D. cowpers       E. bulbourethral

46. The hormone human chorionic gonadotropin (HCG) acts on which of the following structures?
   A. placenta       B. ovarian follicle       C. corpus luteum
   D. hypothalamus   E. none of the above

47. The layer that surrounds the testis and is derived from the peritoneum is the:
   A. tunica albuginea       B. germinal epithelium       C. tunical virginalis
   D. tunica germinativa     E. tunica vaginalis

48. The blood-testes barrier is a barrier which prevents sperm antigens from getting into the bloodstream. The capillaries making up this barrier are classified as:
   A. continuous       B. fenestrated       C. arachnoidal       D. sinusoidal       E. cervical