Chapter 24 : Urinary System

1. What are the organs and structures of the urinary system, what is their function.
2. Describe the following, know their function:
    a. Renal pyramid
    b. Renal medulla
    c. Renal cortex
    d. Renal capsule
    e. Renal lobe
    f. Renal colum
    g. Renal hilus
    h. major calyx, minor calyx
    i. Renal pelvis
    j. Ureter
    k. Bladder
    l. Trigone
    m. rugae.

3. Describe the path of blood through the kidney (begin at the renal artery and end at the renal vein).
4. What is the differences between the afferent arteriol and the efferent arteriol?
5. Where do you find vesa recta, what is their function?
6. What are uriniferous tubules?
7. What is a nephron, what is the general function of the nephron?
8. Describe the following two divisions of the nephron:
    a. Renal corpuscle
    b. Renal tubles
9. Where in the kidney to you find the majority of the nephrons? What are the two classes of nephrons, and what makes them different (which class is more numerous).
10. Describe the anatomy and function of the following components of the nephron:
    a. Renal corpuscle (glomerular capsule, glomerulus)
    b. Renal tubules (PCT, renal loop, DCT).
11. What cell types are found in the following regions of the nephron:
    a. Glomerular capsule
    b. PCT
    c. DCT
    d. Thick and thin segments of the renal loop
12. Describe the anatomy of the juxtaglomerular apparatus (JGA), what is its function?
13. Which cells of the JGA release rennin?
14. What are the basic processes of urine formation (filtration, reabsorption, secretion).
15. What regions of the nephron are responsible for water reabsorption?
16. What regions of the nephron are responsible for salt reabsorption?
17. What region of the nephron is responsible for production of the filtrate?
18. Describe the anatomy of the glomerulus. What are fenestrations?
19. What are podocytes, what is the function of filtration slits?
20. Describe the path urine takes to get out of the kidney and to the bladder. Beginning at the afferent arteriole and end at the urethra.
21. Describe the micuration pathways, what neural pathways are involved.
22. Describe the histology of the following structures:
    a. Bladder
    b. Ureter
    c. urethra