

KIDNEY AND BODY FLUIDS

1. The maximum clearance rate possible for a substance that is totally cleared from the plasma is equal to....
2. What is the clearance of a substance when its concentration in the plasma is 10mg/dl, its concentration in the urine is 100mg/dl and urine flow is 2ml/min?
3. Glomerular capillary hydrostatic pressure = 47 mmHg, Bowman space hydrostatic pressure = 10 mmHg, Bowman space oncotic pressure = 0. At what value of glomerular capillary oncotic pressure would glomerular filtration stop?
4. Which of factor would cause an increase in both glomerular filtration rate and renal plasma flow?
5. Which of the following substances has the highest renal clearance? (PAH, Glucose, Sodium, Chloride).
6. What is happened with the substance wick clearance is greater than the GFR?
7. In which part of nephron is glucose reabsorbed?
8. Which part of the nephron normally reabsorbs the most water?
9. Which part of the nephron is responsible for obligatory absorption and secretion?
10. In which part of the nephron transport of ions is accompanied by an osmotic equivalent of water?
11. How is the osmotic pressure of the fluid entering the descending loop of Henle?:
12. How is the osmotic pressure of the fluid leaving the ascending loop of Henle in relation to plasma?
13. What is happened when the plasma glucose concentration is higher than its transport maximum?
14. What is the function of the P cells?
15. What is the function of the I cells?
16. Which hormone regulates efficacy of sodium uptake and potassium secretion?
17. Which hormone has the greatest effect of Na^+ excretion?
18. How stimulated the calcium uptake?
19. Where placed the osmoreceptors which regulate the osmolality of the body fluids?
20. Which hormones play a role in the response of the body to haemorrhage?
21. Total body water is determined mainly by total body:
22. Extracellular fluid volume is regulated by adjustment of:
23. The osmolality of the body fluids is regulated by the secretion of:
24. Under normal circumstances about half of the non-volatile acid is excreted as:
25. The difference in the plasma concentration of cations and the total amount of the chloride plus bicarbonate is known as the:
26. The primary route for water loss from the body is the _____ system.
27. The primary route for ion loss from the body is the _____ system.
28. The hormone that directly controls water reabsorption by the kidneys is.....
29. When venous return is increased, stretch receptors in the atria of the heart are activated. This results in.....
30. Why is sodium actively reabsorbed in the nephron?
31. What a hormone secrete juxtaglomerular cells?
32. Where converts ACE angiotensin I to angiotensin II?
33. Match the effects of Angiotensin II .
34. An increase in plasma potassium levels is properly called.....
35. A hormone that helps to regulate the sodium ion concentration of the blood is.....
36. The enzyme renin is responsible for the activation of....
37. The osmolarity in the deepest part of the loop of Henle is _____ mOsM.
38. The most important factor affecting the pH of plasma is the concentration of
39. Prolonged vomiting of the stomach's contents can result in
40. The normal pH range for most body fluids is _____.
41. When the pH rises above 7.42, a state of _____ exists.
42. How do kidneys alter urine concentration?
43. Which is the most potent stimulus for vasopressin release?