/ 4/10

QUIZ 10/28

C 1. The composition of the glomerular filtrate
A. Is identical to that of blood plasma
B. Is identical to that of urine
C. Changes as the filtrate passes through the tubule
D. Both A and B
E. Both A and C

E X 2. Functions of the kidneys include
A. The regulation of body salt and water balance
D B. Hydrogen ion homeostasis
C. The regulation of blood glucose concentration
D. Both A and B
E. All of the choices are correct

C 3. The tubular fluid is _____ to plasma as it enters Bowman's space, _____ to plasma at the beginning of the loop of Henle, _____ to plasma at the tip of the loop and _____ to plasma as it leaves the loop to enter the distal convoluted tubule.
A. Isosmotic; hyperosmotic; hyperosmotic; isosmotic
B. Isosmotic; isosmotic; hypoosmotic; hypoosmotic
C. Isosmotic; isosmotic; hyperosmotic; hypoosmotic
D. Isosmotic; isosmotic; hypoosmotic; hyperosmotic
E. Isosmotic; isosmotic; hyperosmotic; isosmotic

C X 4. Water is reabsorbed from the kidney filtrate at
A. The proximal tubule
D B. The ascending limb of the loop of Henle
C. The distal convoluted tubule and the collecting ducts
D. Both A and C
E. All of the choices are correct

C X 5. With the condition known as diabetes mellitus
A. An individual's blood plasma glucose concentration exceeds 180 mg./100ml
A B. The status of blood can be correctly described as hypoglycemic
C. Plasma glucose concentration is less than the transport maximum by the nephrons
D. The ability of tissue cells to take up glucose is dramatically increased beyond normal
E. All of the choices are correct

6. Which of the following does not normally appear in the glomerular filtrate?
A. Glucose
B. Plasma protein
C. Sodium
D. Urea
E. Bicarbonate ion

7. The amount of a substance that is excreted in the urine is equal to the amount that is _____ plus the amount that is _____ minus the amount that is _____.
A. Filtered; reabsorbed; secreted
B. Reabsorbed; filtered; secreted
C. Secreted; reabsorbed; filtered
D. Filtered; secreted; reabsorbed
E. Reabsorbed; secreted; filtered

8. About 2/3 of the reabsorption of sodium and chloride takes place in the structure of the nephron known as the
A. Renalron
B. Glomerulus
C. Proximal convoluted tubule
D. Distal convoluted tubule
E. Collecting duct

9. Which of the following statements regarding glomerular filtration is correct?
A. It will occur when the hydrostatic pressure in the glomerulus exceeds the sum of the fluid pressure in the capsule plus the osmotic force due to proteins in the plasma
B. GFR is increased by sympathetic stimulation of afferent glomerular arterioles
C. GFR increases in response to decreasing plasma volume
D. Both A and B
E. Both A and C

10. Compared to a normal person, a person experiencing metabolic acidosis will have
A. Increased renal secretion of hydrogen ion
B. Increased renal reabsorption of bicarbonate ion
C. Increased renal ~~secretion~~ reabsorption of hydrogen ion
D. Both A and B
E. Both A and C