

## Renal Physiology

1. The renal system does not play a direct role in regulating which of the following?
  - a. Blood solute concentration
  - b. Blood temperature
  - c. Blood pressure
  - d. Blood pH
2. Which of the following anatomical portion of a nephron connects the Bowman's capsule to the loop of Henle?
  - a. Distal convoluted tubule
  - b. Connecting to be all
  - c. Proximal convoluted tubule
  - d. Collecting duct
3. How many nephrons does the average adult human kidney contain?
  - a. ~ 1 million
  - b. ~ 1000
  - c. ~ 10,000
  - d. ~ 100000
4. Urine is formed in a three-step process: which of the following gives the correct order in which these steps take place in the nephron?
  - a. Glomerular filtration, Tubular reabsorption, tubular secretion
  - b. Tubular reabsorption, tubular secretion, glomerular filtration
  - c. Glomerular filtration, tubular secretion, tubular reabsorption
  - d. Tubular secretion, glomerular filtration, tubular reabsorption
5. Which of the following is least likely to be present in the Glomerular filtration (The filtrate produced by the nephron before it enters the loop of Henle) of a healthy adult nephron?
  - a. Amino acids
  - b. Glucose
  - c. Electrolytes
  - d. Large molecular weight protein
6. Which of the following choices correctly traces the route of glomerular filtrate on its path to the collecting duct of a nephron?
  - a. Bowman capsule, proximal convoluted tubule, descending loop of Hanley, ascending loop of Henley, distal tubule
  - b. Proximal convoluted tubule bowman capsule, , ascending loop of Henley, distal tubule, descending loop of Hanley
  - c. Descending loop of Hanley, proximal convoluted tubule, ascending loop of Henley, distal tubule bowman capsule,
  - d. Ascending loop of Henley, bowman capsule, proximal convoluted tubule, descending loop of Hanley, distal tubule

## Urinary System Matching

_____	1 Renin	A	The process of removing nitrogenous waste material, certain salts, and excess water from the blood.
_____	2 Nephron	B	Perform filtration
_____	3 Filtrate	C	The opposite of reabsorption
_____	4 Glomerulus	D	The basic structural and functional unit of the kidney. Under the control of the hypothalamus, this hormone increases the permeability of water in distal and collecting tubules.
_____	5 Aldosterone	E	A hormone released by the kidneys when blood pressure drops.
_____	6 Filtration	F	A fluid consisting of water, glucose, amino acids, some salts and urine.
_____	7 Excretion	G	
_____	8 Cortex	H	Stores urine until about 500cc has accumulated
_____	9 Proximal convoluted tubules	I	The first step in urine formation
_____	10 Bladder	J	Adrenal hormone that controls urinary secretion
_____	11 Diuretics	K	Contains the nephrons
_____	12 Secretion	L	Where 80% of the water filtered out of the blood by the glomerulus is reabsorbed
_____	13 ADH	M	They increase urinary output by inhibiting the reabsorption of water.
		N	Located behind the peritoneum
		O	Measures the filtering capacity of the glomeruli