Excretory System: Practice Questions #1

1. The diagram represents a microscopic view of a functional unit of a kidney. In a kidney, which blood component would not usually pass through the membranes from region A to region B?

   A. red blood cells  
   B. mineral salts  
   C. urea  
   D. water

2. In humans, the organ that most directly regulates the concentration of water in the blood is the

   A. heart  
   B. liver  
   C. pancreas  
   D. kidney

3. During a long-distance run on a hot day, an athlete produces large quantities of sweat. As a result, the kidneys change the rate of urine production. Why is this change important?

   A. Decreased urine production increases the amino acids in the blood.  
   B. Increased urine production removes amino acids produced as a result of running.  
   C. Decreased urine production allows the body to conserve water.  
   D. Increased urine production allows more water to remain in the bloodstream.
4. Which structures in diagram I and diagram II carry out a similar life function?

A. structures 1 and C  
B. structures 2 and D  
C. structures 3 and A  
D. structures 4 and B

5. The diagram below represents three human body systems.

Which row in the chart below correctly shows what systems A, B, and C provide for the human body?

<table>
<thead>
<tr>
<th>Row</th>
<th>System A</th>
<th>System B</th>
<th>System C</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>blood cells</td>
<td>glucose</td>
<td>hormones</td>
</tr>
<tr>
<td>B.</td>
<td>oxygen</td>
<td>absorption</td>
<td>gametes</td>
</tr>
<tr>
<td>C.</td>
<td>gas exchange</td>
<td>nutrients</td>
<td>waste removal</td>
</tr>
<tr>
<td>D.</td>
<td>immunity</td>
<td>coordination</td>
<td>carbon dioxide</td>
</tr>
</tbody>
</table>
6. Some organs of the human body are represented in the diagram below.

Which statement best describes the functions of these organs?

A. \(B\) pumps blood to \(A\) for gas exchange.
B. \(A\) and \(B\) both produce carbon dioxide, which provides nutrients for other body parts.
C. \(A\) releases antibodies in response to an infection in \(B\).
D. The removal of wastes from both \(A\) and \(B\) involves the use of energy from ATP.
Answer Key: Excretory System

1. A
2. D
3. C
4. D
5. C
6. D