

The Urinary System: Glomerular Filtration

1. What force drives filtration at the glomerulus? _____
2. Glomerular filtration is a process of _____
driven by the _____ of the blood.
3. Common components of the filtrate are divided into four categories on the CD program.
These include:
 - a.
 - b.
 - c.
 - d.
4. Blood pressure in the glomerulus is about _____ mmHg.
5. What two pressures oppose filtration and what are their values?
 - a.
 - b.
6. What is the normal net filtration pressure? _____ mmHg
7. With a glomerular filtration rate of 125 ml/min, how much plasma
would be filtered per day? _____ in 24 hours
8. In an exercising individual the afferent arteriole will dilate or constrict (circle one) to
avoid excess fluid loss.
9. Two mechanisms that provide autoregulatory control over renal processes include:
 - a.
 - b.
10. High osmolarity (or high Na^+ and Cl^-) in the ascending loop of Henle will cause afferent
arterioles to dilate or constrict (circle one) by releasing _____.
11. In periods of extreme stress, the sympathetic nervous system will override autoregulation.
An increase in sympathetic flow to the kidney will result in what two important effects
that will aid maintenance of blood pressure?
 - a.

b.