Describe the method of water reabsorption and name the locations for reabsorption in the nephron.

There are actually two methods of water reabsorption in the nephron. The first is osmosis, where water molecules travel across a semipermeable membrane from a lower to a higher concentration of water molecules. Osmosis is passive reabsorption, and occurs in the proximal convoluted tubule, the descending limb of the loop of Henle and the distal convoluted tubule. The second is facultative water reabsorption (active reabsorption), aided by ADH and aldosterone. It occurs in the last part of the distal convoluted tubule and the collecting ducts.

What is the effect of severe and prolonged hypotension (low blood pressure) on renal filtration and renal blood flow?

Given what I know about renal filtration in the nephron, lower blood pressure would mean that fewer molecules are pushed from the blood vessels to the nephron in the glomerulus, which would result in less urine and more stuff you don't want being recycled ending up in your blood. It would also have the effect of slowing blood flow to the kidney, so that the kidneys (which require, together, 20% of the blood flow in the body) wouldn't be able to function properly.