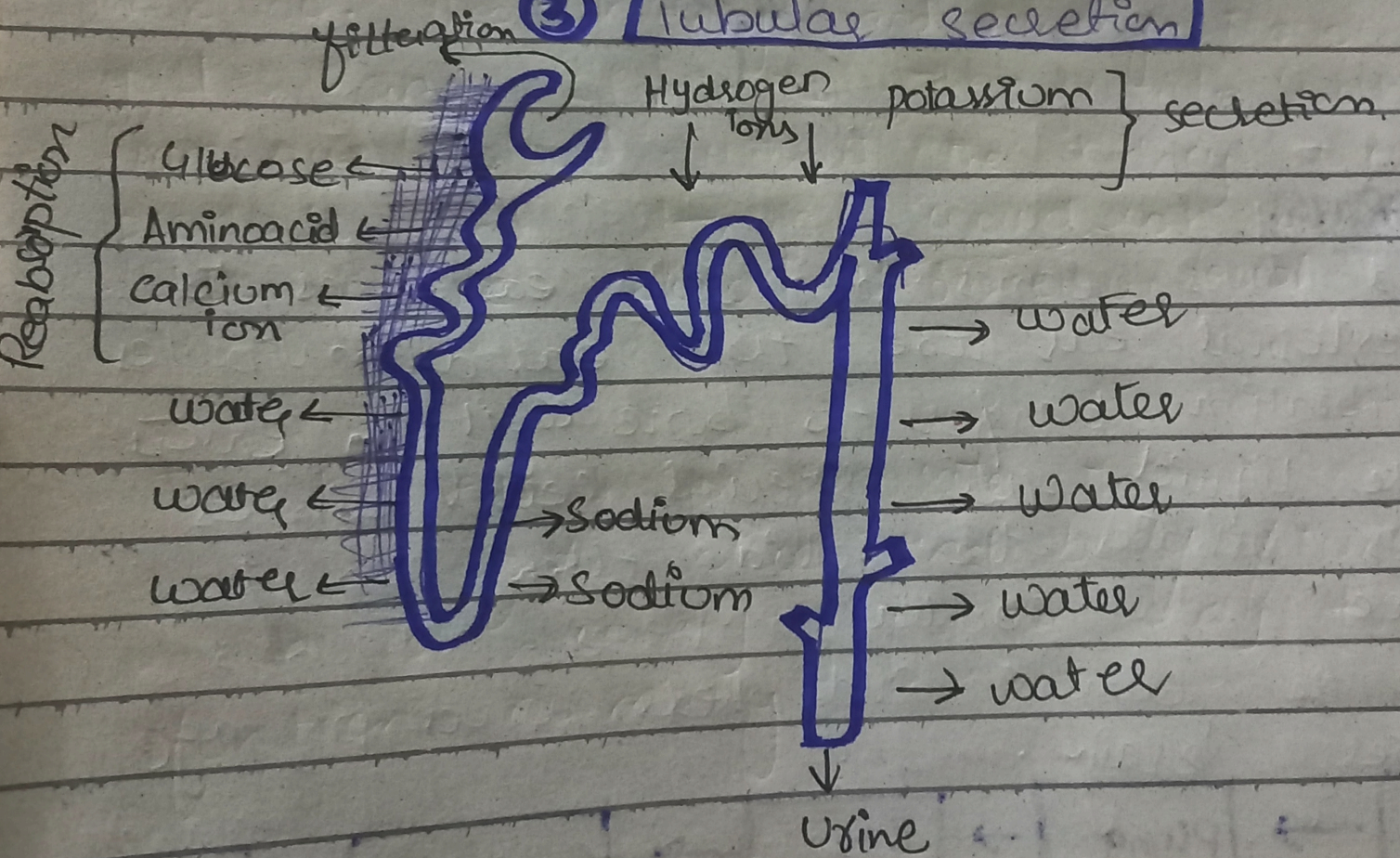


Q: How the URINE is formed? (2023)

FORMATION OF URINE

• Formation of urine take place from the following three process.

- 1 Ultra filtration
- 2 Selective Reabsorption
- 3 Tubular secretion



ULTRA FILTRATION:

Blood enters the glomerulus at a hydrostatic pressure about 60 mmHG to filter out some components of bloods. Glomerular filtration is responsible ~~for~~ of filtration of large amount of urea, water, amino acids, vitamins and harmful substances like uric acid, ~~and urea~~ urea etc. About 650 ml of blood passes through the glomerulus in which 25ml is filtered out in just one minute. About 150-180 litres of nephric filtrate is formed and about 1.5 to 1.8 litres of urine is excreted out.

SELECTIVE REABSORPTION:

As the nephric filtrate moves in the nephron towards the collecting tubule, about 99% of water, as a whole glucose, amino acids, most of the Na^+ and Cl^- some urea and uric acid are absorbed back into the blood. The process in which nephric useful substances are reabsorbed through nephric filtrate is called selective reabsorption.

TUBULAR SECRETION:

The third process by which the kidney cleans blood called Tubular secretion involves substances being added to the tubular secretion. This removes excessive quantities of certain dissolved substances from the body, and also maintains the blood level PH. As a result of these three processes blood changes into urine.