

# Excretory Products and their Elimination



## TRY YOURSELF

## ANSWERS

1. Class Arachnida has coxal glands as excretory organs.
2. Biliverdin and bilirubin
3. Some animals perform two modes of excretion. This is known as dual excretion. Adult frogs and toads are ureotelic but their larvae are aquatic and ammonotelic.
4. Juxtamedullary nephrons form 15% of total nephrons and cortical nephrons form 85% of total nephrons.
5. Lacis cells are located in the interval between the macula densa and the afferent and efferent arterioles.
6. Differences between male urethra and female urethra are as follows:

S.No.	Male urethra	Female urethra
(i)	It is much longer (about 20 cm in length).	It is short (about 3-5 cm in length).
(ii)	It carries both urine and semen.	It carries only urine.
(iii)	It opens out at the tip of penis by urinogenital aperture.	It opens by urinary aperture in front of vaginal aperture.
(iv)	It has three regions: prostatic (3-4 cm), membranous (1 cm) and penial (15 cm).	It is not differentiated into such regions.

7. The active reabsorption of sodium ions from the filtrate in DCT occurs under the influence of antidiuretic hormone (ADH).

8. Maximum hydrogen ion secretion occurs in the proximal convoluted tubule (PCT).
9. Alcohol decreases the level of ADH. This lowers reabsorption of water and increases loss of water in urine. Therefore, beverages having a high content of alcohol cause excessive urination and dehydration.
10. Antidiuretic hormone (ADH)
11. Angiotensin-II
12. The colour of urine is caused by the pigment urochrome, which is a breakdown product of haemoglobin from worn out red blood corpuscles. The colour of the urine may be affected by food.
13. Hematuria is the presence of blood or blood cells in urine while haemoglobinuria is the presence of haemoglobin in urine.
14. Salivary glands take part in the excretion of heavy metal ions such as lead and mercury.
15. Intestine is considered as an excretory organ because the epithelial cells of colon excrete excess salts of calcium and iron along with faeces.
16. Immunosuppressants prevent graft rejection by the body's immune response. An ideal immunosuppressant suppresses immunity against foreign tissue but maintains immunity against infection. Cyclosporin is a good immunosuppressant.
17. Renal failure refers to a decrease or stop of glomerular filtration due to low blood volume, decreased cardiac output, damaged renal tubules, etc. Haemodialysis (or treatment by artificial kidney) is given to a person who is suffering from renal failure.

