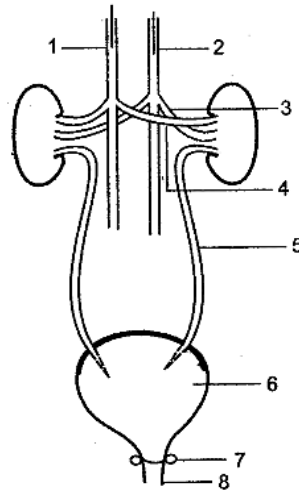


Board – ICSE

Class – 10

Topic – Excretory System

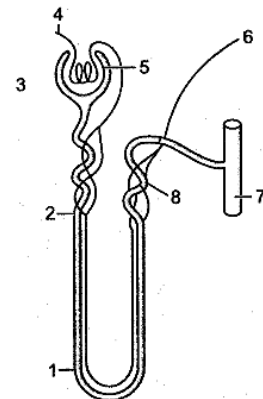
1. Why is urine yellow in color?
2. What are the functions of ureter and urethra?
3. Write about the excretory role of the lungs.
4. Give reason “All living things must excrete”.
5. Why urine is acidic while blood is alkaline?
6. There is frequent urination in winter than in summer.
7. The diagram shows the. Study the same and then answer the questions that follow:



- (i) Name the parts labeled 1, 2, 3, and 4.
  - (ii) Give the main function of the parts labeled 5,6, 7 and 8.
  - (iii) Name the endocrine gland which could be added in diagram and state its location/position.
8. The diagram below represents a mammalian kidney tubule (nephron) and its blood supply.

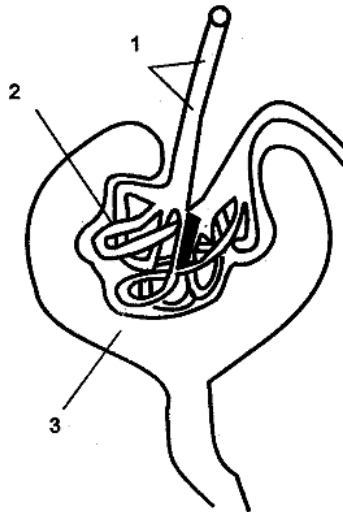
Parts indicated by the guidelines 1 to 8 are as follows:

1. U-shaped loop of Henley
2. Proximal convoluted tubule with blood capillaries
3. Bowman’s capsule
4. Afferent arteriole from renal artery
5. Glomerulus
6. Venule to renal vein
7. Collecting tubule
8. Distal convoluted tubule with blood capillaries.

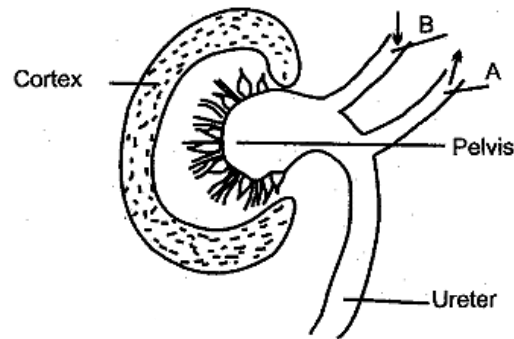


Study the diagram and answer the following questions in each case:

- (i) Where does ultrafiltration take place?
  - (ii) Which structure contains the lowest concentration of urea?
  - (iii) Which structure contains the highest concentration of urea?
  - (iv) Which structure contains the lowest concentration of glucose?
  - (v) Where is the most water reabsorbed?
9. Explain the terms, Glomerulus and Urinary bladder.
  10. Describe about physical properties of urine.
  11. How does hydrostatic pressure develop in the glomerulus?
  12. Why excretion is necessary?
  13. As a result of ultrafiltration along with excretory products certain useful products like glucose, salt etc. are also filtered but these are not excreted?
  14. Glucose is absent in the urine of a healthy person?
  15. The urine is slightly thicker in summer than winter?
  16. Study the diagram given below and then answer the questions that follow:



- (i) Name the region in the kidney where the shown structure is present ?
  - (ii) Name the parts labeled 1, 2 and 3.
  - (iii) Name the stages involved in the formation of urine.
  - (iv) What is the technical term given to the process occurring in 2 and 3?  
Briefly describe the process.
17. Given below is a simple diagram of the human kidney cut open longitudinally. Answer the following questions:



- (i) Give the definition of excretion.
  - (ii) Name the units of the kidney.
  - (iii) Why does the cortex of the kidney show a 'dotted' appearance?
  - (iv) Mention two functions of the kidney.
  - (v) Write two differences in the composition of the blood flowing through blood vessels A and B.
18. Explain the term "Loop of Henley"