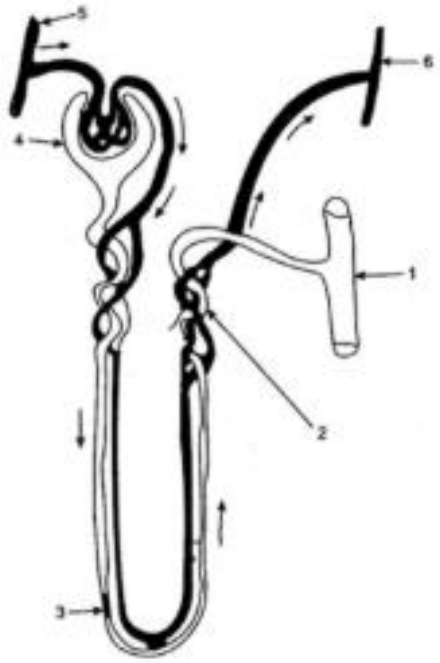
INDIAN SCHOOL NIZWA
LASS XI BIOLOGY – CH 16- COMPETENCY BASED QUESTIONS

Question 1: The given diagram represents a nephron and its blood supply. Study the diagram and answer the ahead questions:



(i) Label parts 1,2,3 and 4.

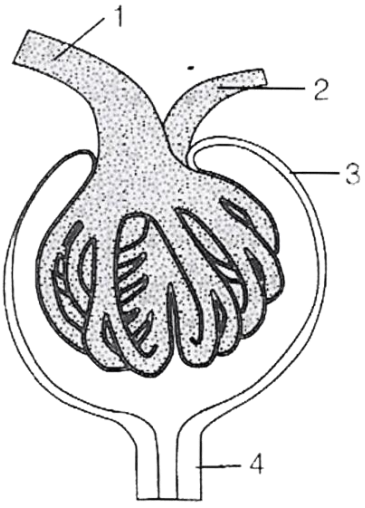
(ii) State the reason for the high hydrostatic pressure in the glomerulus.

(iii) Name the blood vessel which contains the least amount of urea in this diagram.

(iv) Name the two main stages of urine formation.

(v) Name the part of the nephron which lies in the renal medulla.

Question 2: 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, 2,3 and 4.

(iii) Name the stages involved in the formation of urine.

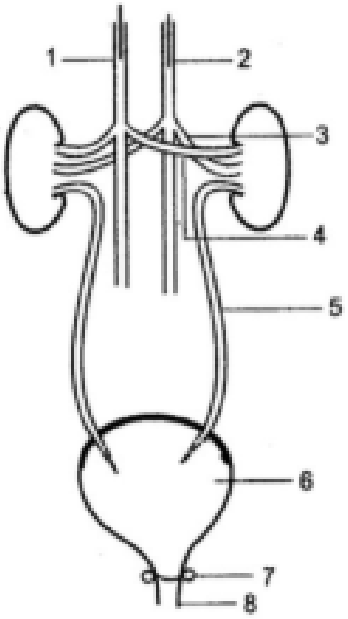
(iv) What is the technical term given to the process occurring in 2 and 3? Briefly describe the process.

Question 3: The diagram shows the Excretory System of a Human being. Study the same and then answer the questions that follow:

(i) Name the parts labeled 1, 2,3, and 4.

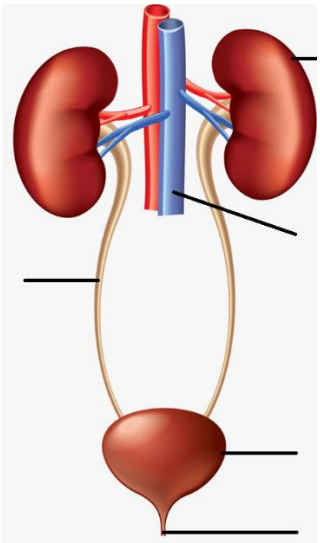
(ii) Give the main function of the parts labeled 5,6, 7 and 8.

(iii) Name the endocrine gland which could be added in diagram and state its location/position.



Question 4: Given below is the figure of certain organs and associated parts in the

human body, study the same and then answer the questions that follow:



(i) Name all the organ systems shown completely or even partially.

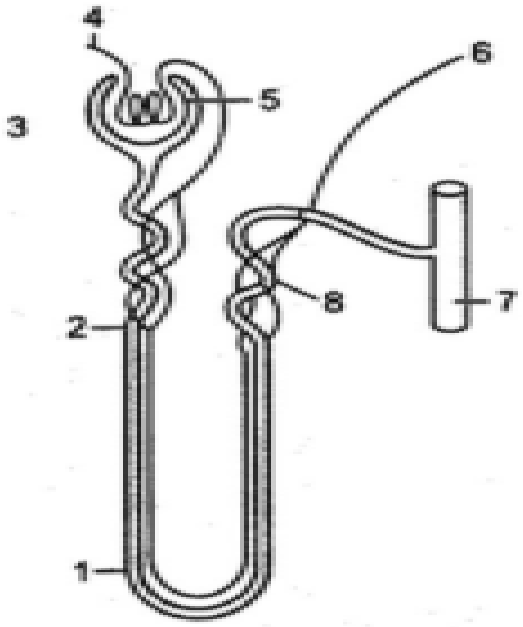
(ii) Name the parts numbered 1 to 5.

(iii) Name the structural and functional unit of the part marked ‘1’.

(iv) Name the two main organic constituents of the fluid that flows .down the part labeled ‘3’.

(v) Name the two major steps involved in the formation of the fluid that passes down the part labeled ‘3’.

Question 5: The diagram below represents a mammalian kidney tubule (nephron) and its blood supply. Parts indicated by the guidelines 1 to 8 are as follows:



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 ?

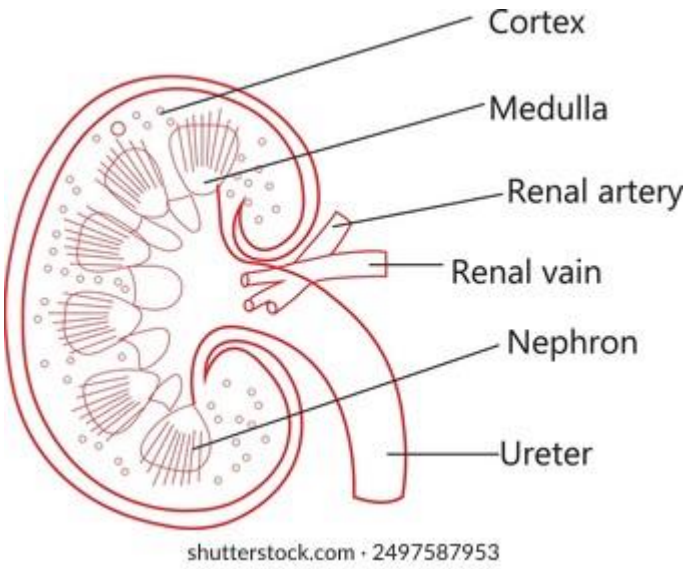
(iv) Which structure contains the lowest concentration of glucose ?

(v) Where is the most water reabsorbed ?

Question 6: Given below is a simple diagram of the human kidney cut open longitudinally.

Answer the following questions:

i) Give the definition of excretion.



(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 andB