

**Marks**

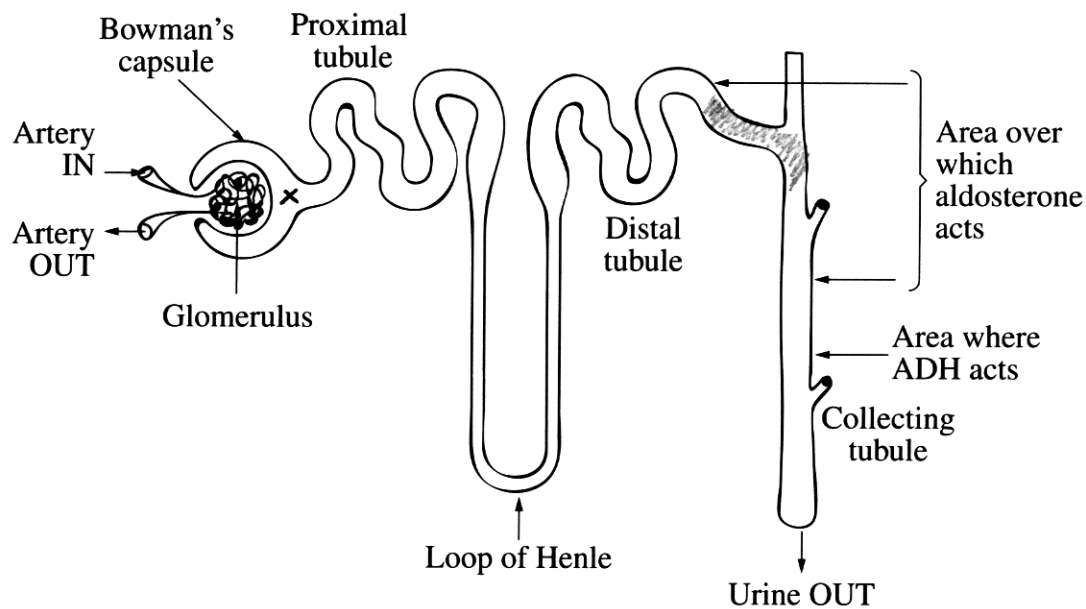
**Question 23 (6 marks)**

The diagram represents a nephron which is the functional unit of the kidney.

Nephrons make urine by:

- filtering small molecules and ions from the blood;
- reabsorbing the needed amounts of useful materials.

Surplus or waste molecules and ions flow out as urine.



- (a) Identify the area where filtration occurs, by marking it with an X on the diagram. **1**
- (b) Identify the area where reabsorption occurs, by shading it on the diagram. **1**
- (c) Discuss the importance of hormone replacement therapy for people who cannot secrete aldosterone. **4**

*The importance of aldosterone is that it helps dilute the urine and therefore if their urine is not dilute it can make them ill. Therefore hormone replacement is important for restoring the persons ability to produce diluted urine.*

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