4 The kidney is an organ in the excretory system.

(a) Describe what is meant by the term excretion.

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.....

..... [2]

(b) State the name of the substance excreted by the lungs.

..... [1]

(c) Fig. 4.1 shows a simplified diagram of a cross-section of a kidney.

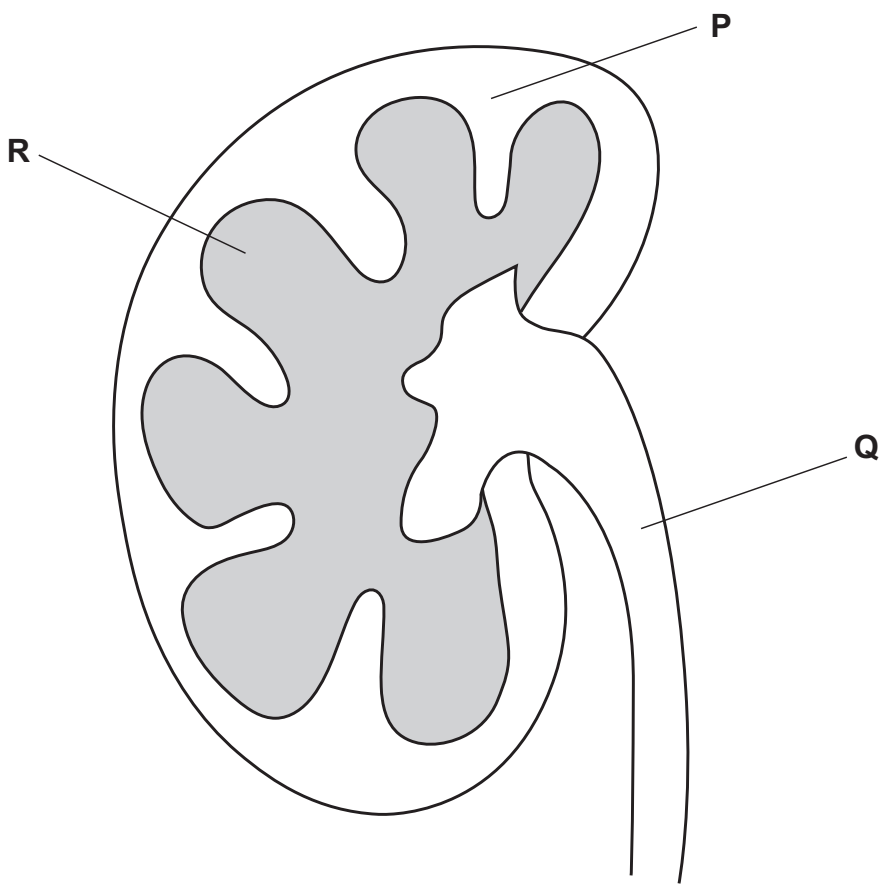

Fig. 4.1

State the names of the parts labelled **P**, **Q** and **R** in Fig. 4.1.

P .....

Q .....

R .....

[3]

(d) Fig. 4.2 shows the structure of a kidney nephron.

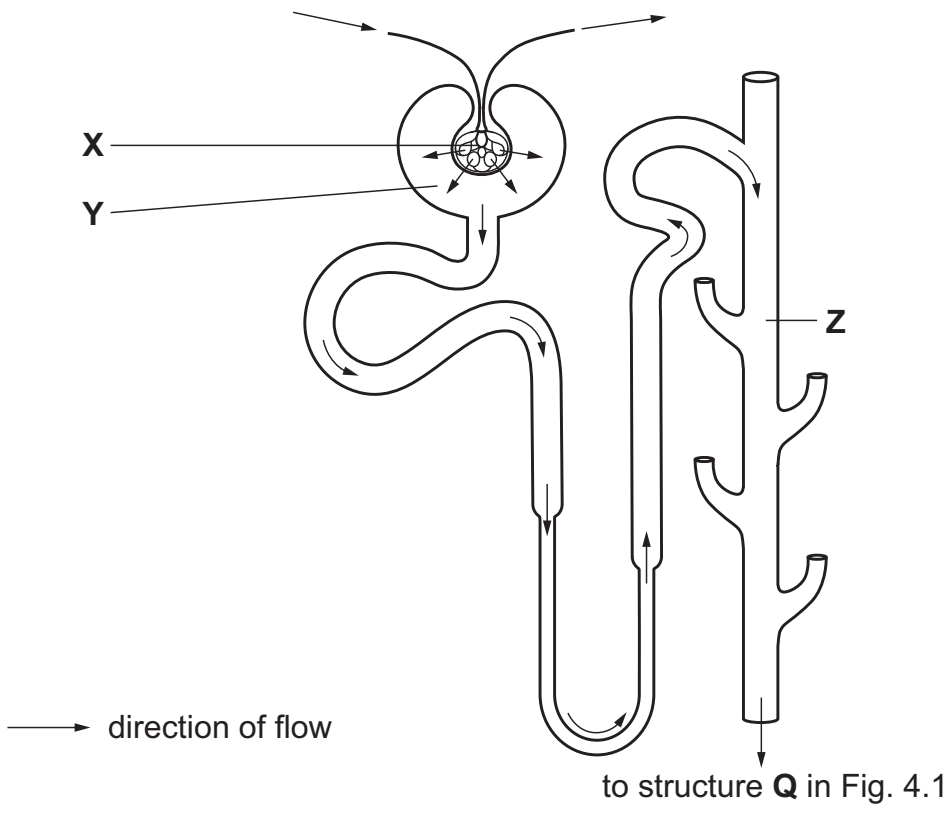

Fig. 4.2

Describe **and** explain the difference in the composition of the fluids in structures **X**, **Y** and **Z** in Fig. 4.2.

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..... [6]

(e) The liver is also involved in excretion.

Describe **two** ways that amino acids are processed in the liver.

1 .....

2 .....

[2]

[Total: 14]