

Name: ..... Adm no .....

School: ..... Candidate's sign .....

Date: .....

**FORM II**

**BIOLOGY**

**TIME: 2 hours**

*Kenya Certificate of Secondary Education (K.C.S.E.)*

**FORM II**

PAPER 231

**BIOLOGY**

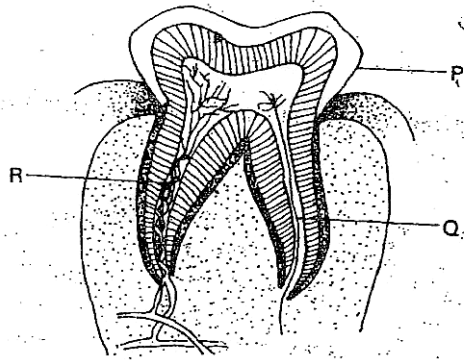
**INSTRUCTIONS TO CANDIDATES:**

*Write your **name** and **index number** in the spaces provided.*

*Sign and write **date** of examination in the spaces provided above.*

*Answer **all** the questions in the spaces provided. Answer **all** the questions in this section in the spaces provided.*

1. Below is a diagram representing a longitudinal section of a human tooth.



a) Name the type of tooth.

b) Give a reason for your answer in (a) above

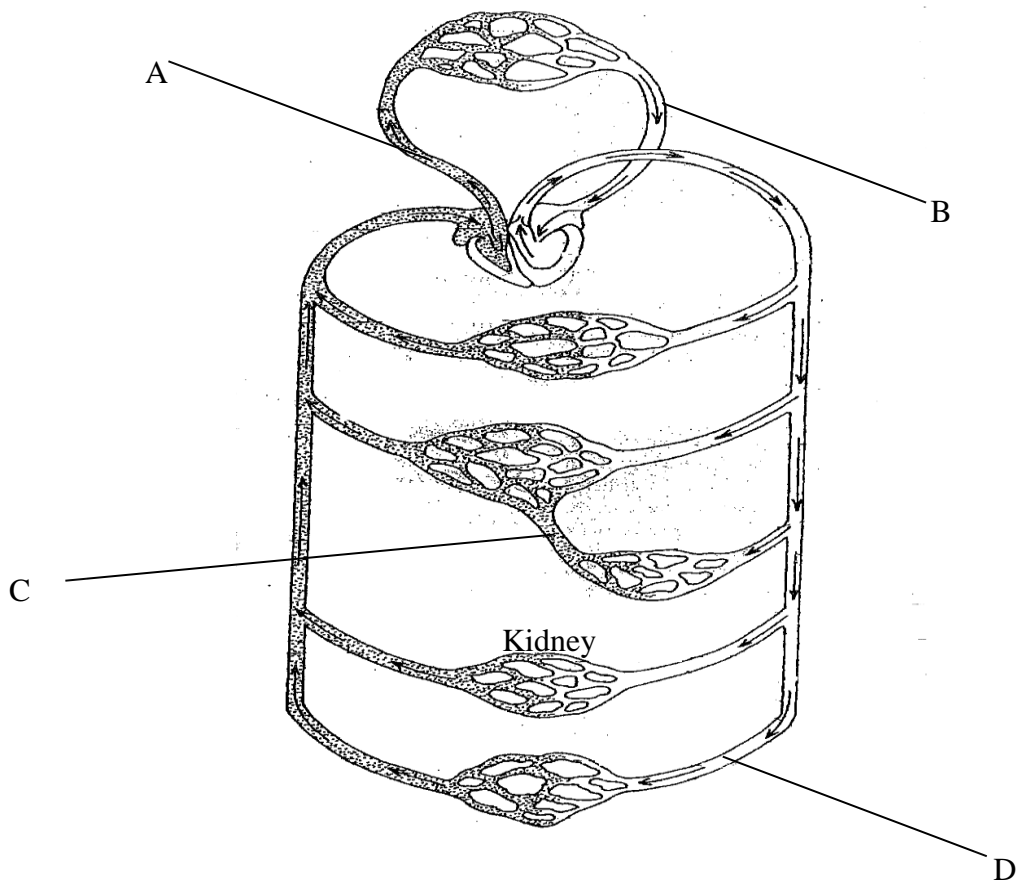
c) Name structures P, Q, and R and give their functions.

(6 marks)

d) State **four** ways of keeping teeth healthy.

(4 marks)

2. The diagram below shows circulation of blood in a mammal.



a) Name the type of circulation represented above (1 mark)

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b) Give reason for your answer (1 mark)

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c) Name the blood vessel labeled A, B, C, D (4 marks)

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d) State **two** roles of blood capillaries (2 marks)

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e) Name other **two** types of blood vessels beside capillaries (2 marks)

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f) State **two** functional differences between the blood vessels you have named above (2 marks)

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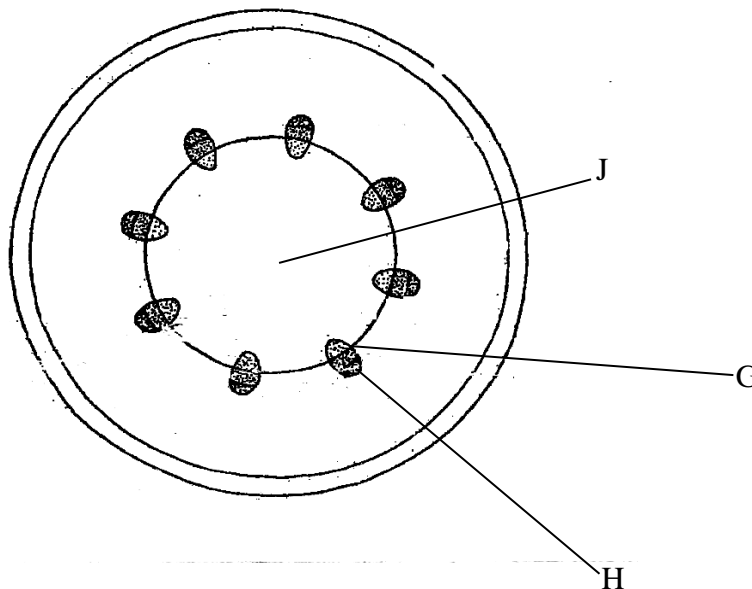
g) State **two** roles of the red blood cells (2marks)

h) Name the **three** types of immunity (3 marks)

3. i) What is gaseous exchange? (1 marks)

ii) Name the mineral element and vitamin required for blood clotting (2 marks)

4. The diagram below represents a transverse section of a plant part



a) Identify the class from which it is obtained (1 mark)

b) Name parts G and H (2 marks)

c) Give **one** role of J (1 marks)

d) Name the **three** types of transpiration (3 marks)

Turnover

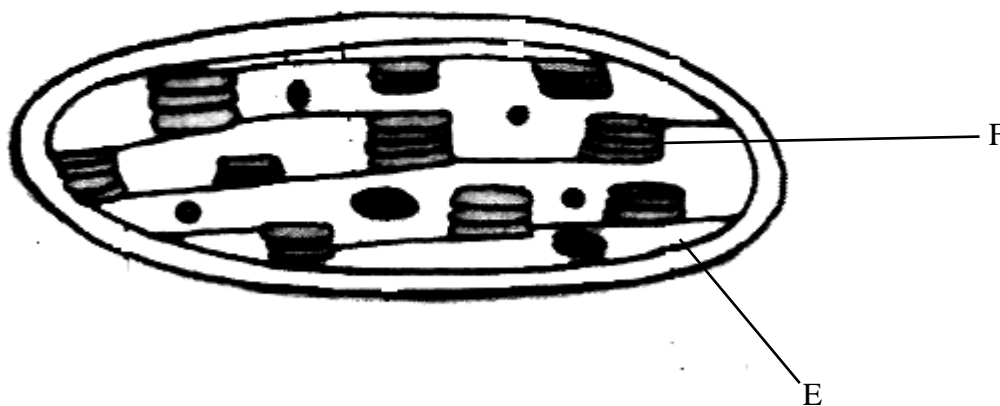
e) Give **one** difference between xylem vessels and xylem tracheids (2 marks)

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f) Name the strengthening material in vessels (1 marks)

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5) The diagram below shows an organelle in plants  
a) Identify the organelle (1 marks)



b) Name the parts E and F (2 marks)

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c) Give one role of part E (1 marks)

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d) Name two requirements for photosynthesis (2 marks)

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e) Explain what happens during the light stage of photosynthesis.

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6. Discuss the factors that affect rate of enzyme action.

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