

ST ANDREW'S SECONDARY SCHOOL
Secondary 3 Pure Biology

Practice worksheet: Nutrition in Humans

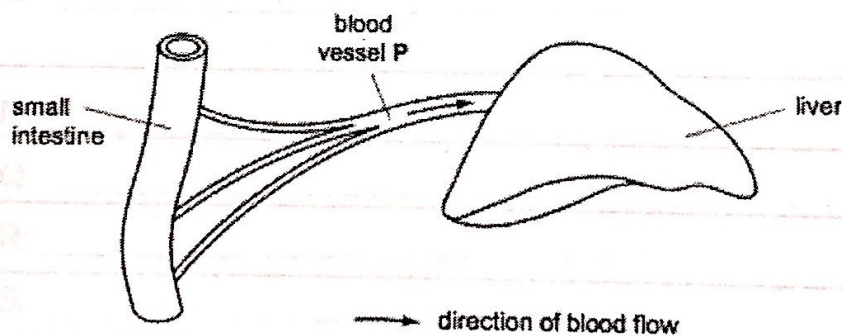
Name: _____ () Class: _____ Date: _____

1 Which of the following is secreted by the pancreas?

- A Bile
- B *Pepsin*
- C *Maltase*
- D Trypsinogen

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2 The diagram below shows the small intestine, the liver and the blood vessel **P** that joins them.

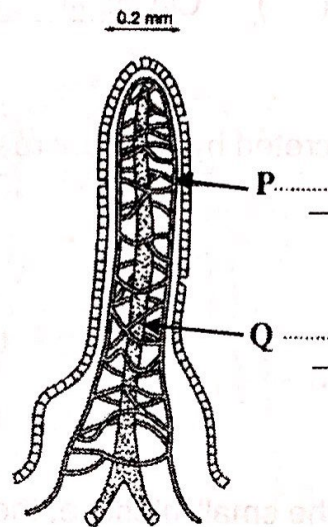


Which carbohydrate is found in blood vessel **P** and which carbohydrate is found in the liver?

	<u>blood vessel P</u>	<u>liver</u>
A	glucose	glycogen
B	glycogen	glucose
C	starch	glycogen
D	glucose	starch

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- 3 The figure below shows a villus, in longitudinal section, from the ileum of a mammal.



- a) How do villi improve the efficiency of the ileum?

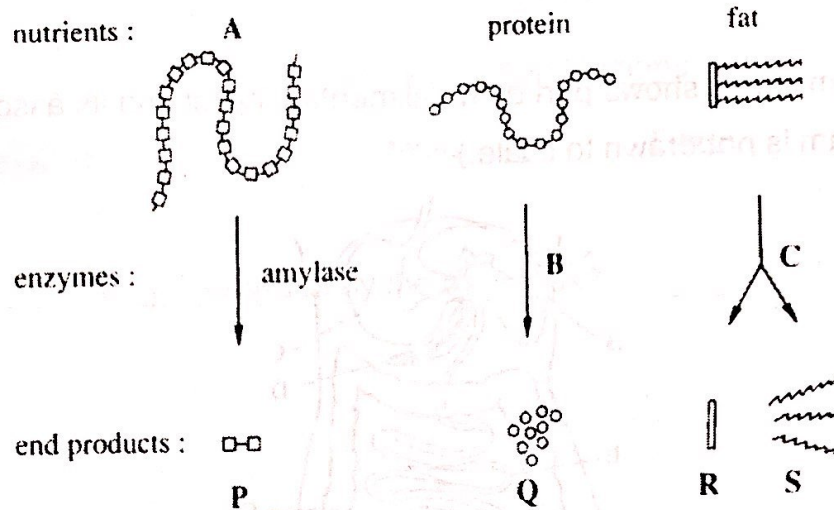
- b i) On the diagram, label **P** and **Q**.

- ii) What are the functions of **P** and **Q**?

Function of **P**: _____

Function of **Q**: _____

- 4 The diagram below represents the digestion of three nutrients.



- a) Identify each of the following.

i) nutrient **A:** _____

ii) enzymes **B:** _____

C: _____

iii) end products **P:** _____

Q: _____

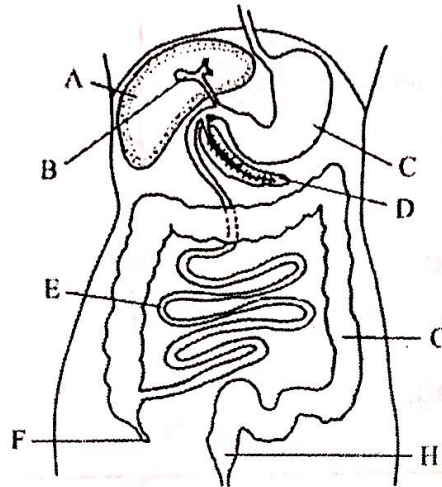
R: _____

S: _____

- b) Name a region of the alimentary canal where both enzymes **B** and **C** may be found.

- c) Explain why it is necessary, during digestion, to change the nutrient molecules in the way shown in the diagram above?

- 5 The diagram below shows part of the alimentary canal and its associated organs. (The diagram is not drawn to scale.)



- a) Name the parts **A** to **D**.
- A:** _____
- B:** _____
- C:** _____
- D:** _____
- b) Using letters in the diagram only, indicate the part(s) where:
- i) digestive enzymes are secreted: _____
- ii) digestion is completed: _____
- iii) absorption begins: _____
- iv) water is absorbed: _____
- v) faeces are stored: _____
- c) Name the substance stored in part **B**. What is the function of this substance?
- _____
- d) Give three functions that part **A** carries out.
- _____
- _____
- _____