

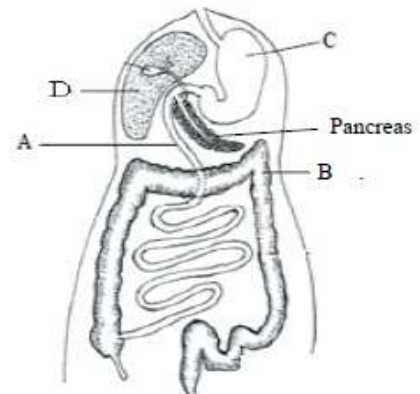


Biology
Leaving Certificate
Ordinary Level

Past Exam Questions on
Digestive System

Q15 Part (c) Section C 2012

- (c) The diagram shows the human digestive system.
- Name the parts labelled A, B and C.
 - Explain the term *digestion*?
 - Name **one** human tooth type and give its function.
 - Part C secretes hydrochloric acid onto the ingested food. Give **one** function of this acid.
 - Give **one** digestive function of part D.
 - Give **one** digestive function and **one** non-digestive function of the pancreas.



Q13 Section C 2010

13. (a) (i) What is meant by a 'balanced' diet?
- (ii) Distinguish between autotrophic nutrition and heterotrophic nutrition. (9)
- (b) (i) Explain the word *digestion*.
- (ii) Give **one** role for **each** of the following types of teeth:
- Incisors
 - Molars.
- (iii) Peristalsis begins when food enters the oesophagus. What is meant by *peristalsis*?
- (iv) Describe the following changes that happen to food in the stomach:
- Mechanical changes
 - Chemical changes.
- (v) What is the pH of the stomach contents?
- (vi) Where does the partially digested food go when it leaves the stomach? (27)
- (c) The liver, the gall bladder and the pancreas all play a part in digestion. Digested food is carried to the liver where it is processed. Undigested food enters the large intestine.
- (i) State
- One** role of the pancreas in digestion.
 - One** role of the gall bladder in digestion.
- (ii) From what part of the digestive system does the digested food enter the blood?
- (iii) Name the blood vessel that carries the digested food to the liver.
- (iv) State **two** functions of the liver – other than the processing of digested food.
- (v) The colon contains many symbiotic bacteria – mostly 'good' bacteria. State **two** benefits we get from these bacteria. (24)

Q13 Section A 2008

2. Choose a term from the following list and place it in **Column B** to match the description in **Column A**. The first one has been completed as an example:

amino acid, nitrogen, haemoglobin, keratin, enzyme

Column A	Column B
A protein present in blood	haemoglobin
An element always present in proteins along with C, H, O	
A protein which changes reaction rates	
The end product of protein digestion	
A structural protein	

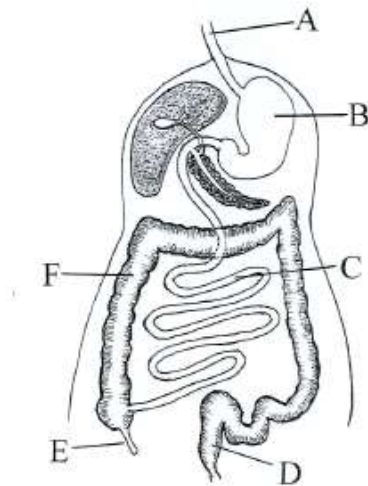
Q13 Section C 2008

13. (a) Bile is involved in digestion in the human body.

- (i) 1. Where is bile produced?
2. Where is bile stored?
- (ii) Where does bile act in the alimentary canal?

(9)

(b) The diagram shows the digestive system of the human.



- (i) Name the parts labelled A, B, C, D, E and F.
- (ii) What is the role of peristalsis in the digestive system?
- (iii) Where do the products of digestion enter the blood?
- (iv) How do these products of digestion pass into the blood?

(27)

- (c) (i) For each of the parts labelled B and C in the diagram above, state whether the contents are acidic, neutral or alkaline.
- (ii) Amylase is an enzyme that is found in saliva. State the substrate and the product of this enzyme.
- (iii) State two functions of symbiotic bacteria in the alimentary canal.
- (iv) What is meant by egestion? From which labelled part of the diagram does egestion occur?

(24)

Q15 Part (c) Section C 2007

- (c) (i) Copy the following table into your answer book. Complete the table by inserting the correct terms from the following list:

molar teeth, symbiotic bacteria, peristalsis, bile salts, lipase, stomach

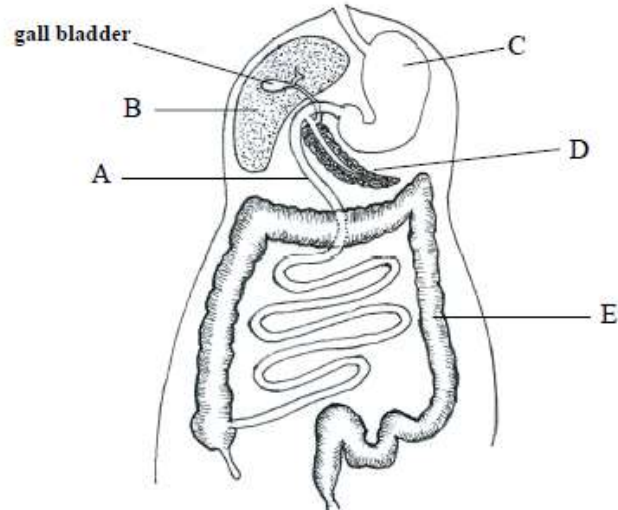
	an organ for churning of food to chyme
	waves of contractions passing along the gut
	grind food into smaller pieces
	an enzyme that turns fats to fatty acids and glycerol
	emulsify fats
	produce vitamins

- (ii) Copy the following passage into your answer book and fill in the blank spaces.

“The passage of the products of digestion from the intestine to the blood is called
Folds in the lining of the intestine, called, increase the surface area for this passage.
Amino acids from the digestion of and monosaccharides from the digestion of
..... enter the blood in this process.”

Q12 Section C 2006

12. (a) (i) Write the dental formula for an adult human. (9)
(ii) Give a function of any one of the teeth indicated in the dental formula.
- (b) The diagram shows the human digestive system.



- (i) Identify A, B, C, D and E in the diagram.
- (ii) What is an amylase? Name a site of amylase action. What is the approximate pH value at this site?
- (iii) Give one function of symbiotic bacteria in the human digestive system.
- (iv) State a benefit of dietary fibre. (27)
- (c) (i) What is meant by absorption?
- (ii) Where in the digestive system are the products of digestion absorbed? State one way in which this part of the system is adapted for absorption.
- (iii) Name the blood vessel that joins the part of the digestive system that you have named in (ii) to B in the diagram.
- (iv) In which part of the digestive system is water absorbed? Give another function of this part of the digestive system. (24)