



Biology Leaving Certificate Higher Level

Past Exam Questions on:

Food

Q1 2013

1. In the case of any **five** of the following pairs of terms, clearly distinguish between the first term and second term by writing a brief sentence about each.

- (a) Starch. _____
Glucose. _____
- (b) Amino acids. _____
Proteins. _____
- (c) Cellulose. _____
Keratin. _____
- (d) Enzymes. _____
Hormones. _____
- (e) Biuret test. _____
Benedict's (Fehling's) test. _____
- (f) Fats. _____
Oils. _____

Q1 2012

1. Answer **five** of the following:

- (a) Which food type may be identified in the laboratory by the use of Sudan III or brown paper?

- (b) Give one role for a **named** mineral in plants.

- (c) What colour indicates a strong positive result of the Fehling's or Benedict's test for reducing sugar?

- (d) Give a role of lipids in cells.

- (e) Give a role of water in the human body other than as a component of cytoplasm and body fluids.

- (f) How many common amino acids are found in proteins?

Q1 -2011

1. Answer **five** of the following by filling in the blank spaces.

- (a) In relation to the human diet, what is meant by a trace element?
- (b) Give an example of a trace element
- (c) State **one** way in which an oil differs from a fat
- (d) Vitamins may be divided into two groups depending upon their solubility.
Name these **two** groups.
 - (i)
 - (ii)
- (e) What is a triglyceride?
- (f) Give an example of a catabolic reaction in a cell

Q1 2010

1. Answer **five** of the following by filling in the blank spaces.

- (a) In relation to the human diet, what is meant by a trace element?
- (b) Give an example of a trace element
- (c) State **one** way in which an oil differs from a fat
- (d) Vitamins may be divided into two groups depending upon their solubility.
Name these **two** groups.
 - (i)
 - (ii)
- (e) What is a triglyceride?
- (f) Give an example of a catabolic reaction in a cell

Q1 2009

1. Answer **five** of the following:

- (a) In carbohydrates, which two elements are in the ratio 2:1? _____
- (b) Cellulose is a polysaccharide. Explain the term *polysaccharide*.

- (c) Name a polysaccharide other than cellulose. _____
- (d) Where precisely in a plant cell would you expect to find cellulose? _____

- (e) Name a test or give the chemicals used to demonstrate the presence of a reducing sugar.

- (f) In relation to the test referred to in (e) which of the following is correct?
1. No heat needed.
2. Heat but do not boil.
3. Boil.

Q 1 - 2008

Answer **five** of the following by filling in the blank spaces.

- (a) Biomolecules of the general formula $C_x(H_2O)_y$ are examples of
- (b) Give **two** functions of water in a living organism.
1.
2.
- (c) Is energy release a feature of anabolic or catabolic reactions?
- (d) How do fats differ from oils at room temperature?
- (e) Name the test or give the chemicals used to detect the presence of protein in a food sample
- (f) Name a structural polysaccharide

Q 1 - 2007

Give an example of **five** of the following;

- (a) A catabolic reaction in an animal.
- (b) An anabolic reaction in a plant.
- (c) A fat-soluble vitamin.
- (d) A reducing sugar.
- (e) A polysaccharide
- (f) A trace element in the human diet

Q 7 - 2006

7. (a) State a use of each of the following in the biology laboratory.
- (i) Biuret test (copper sulphate and sodium hydroxide solutions)
 - (ii) Benedict's (or Fehling's) test
- (b) In the case of each of the following state:
- 1. An investigation in which you used it,
 - 2. The precise purpose for its use in the investigation that you have indicated.
- (i) IAA
 - 1.....
 - 2.....
 - (ii) Starch or skimmed milk agar plates.
 - 1.....
 - 2.....
 - (iii) Cold alcohol (ethanol)
 - 1.....
 - 2.....

(iv) Alkaline pyrogallol or anaerobic jar

1.....

2

Q 1 – 2005

Answer **five** of the following by writing a word in the space provided.

- (a) Cellulose is an example of a structural
- (b) Vitamins are either water-soluble or-soluble.
- (c) Fats are composed of oxygen, hydrogen and
- (d) When an iodine solution is added to a food sample and remains red-brown in colour,
..... is absent.
- (e) When two monosaccharides unite they form a.....
- (f) Removal from the body of the waste products of metabolism is called