

## Glossary of Terms used in Biology Papers

Reading the question carefully is the first important step in any examination. Understanding the terms used in Biology examination questions helps you to know what sort of answer is expected.

- **Calculate** : is used when a numerical answer is required. In general, working should be shown, especially where two or more steps are involved.
- **Comment** : is intended as an open-ended instruction, inviting candidates to recall or infer points of interest relevant to the context of the question, taking account of the number of marks available.
- **Compare** : requires candidates to provide both similarities and differences between things or concepts. Sometimes the number of similarities or differences to be provided is given in the question. If not, refer to the marks allocated for the question. Usually 1 mark is awarded for each similarity or difference.
- **Define** : requires candidates to provide a concise statement to show your understanding of the term.  
*Example* : Define the term herbivores.  
*Expected answer* : Herbivores are consumers that feed mainly on plants.
- **Describe** : requires candidates to state in words (using diagrams where appropriate) the main points of the topic. You are not asked to explain anything.  
It is often used with reference either to particular phenomena or to particular experiments. In the former instance, the term usually implies that the answer should include reference to (visual) observations associated with the phenomena.
- **Determine** : often implies that the quantity concerned cannot be measured directly but is obtained by calculation, substituting measured or known values of other quantities into a standard formula.
- **Differentiate** : means to give only differences with reference to two or more things.

# 0 Level Biology

---

- **Discuss** : requires candidates to give a critical account of the points involved in the topic.
- **Estimate** : implies a reasoned order of magnitude statement or calculation of the quantity concerned, making such simplifying assumptions as may be necessary about the points of principle and about the values of quantities not otherwise included in the question.
- **Explain** : means to give a biological reason to account for why something is so.
- **Find** : is a general term that may be variously interpreted as calculate, measure, determine, etc.
- **List** : requires you to write your answer in point form in either a single word or short sentence without explanation. Where a given number of points is specified, this should not be exceeded.  
*Example* : List the environmental factors affecting the rate of transpiration.  
*Expected answer* : 1. Temperature 2. Air humidity 3. Light intensity 4. Wind
- **Measure** : implies that the quantity concerned can be directly obtained from a suitable measuring instrument, e.g. length, using a rule, or mass, using a balance.
- **Name** : means you have to give the biological name of the process or the structure of the organism.  
*Example* : Name the green organelle in photosynthesising cells.  
*Expected answer* : Chloroplasts
- **Outline** : implies brevity, i.e. restricting the answer to giving essentials.
- **Predict**  
or **deduce** : implies that the candidate is not expected to produce the required answer by recall but by making a logical connection between other pieces of information. Such information may be wholly given in the question or may depend on answers extracted from an earlier part of the question.

# O Level Biology

---

- **Sketch** : when applied to **graph** work, implies that the shape and/or position of the curve need only be qualitatively correct, but candidates should be aware that, depending on the context, some quantitative aspects may be looked for, e.g. passing through the origin, having an intercept, asymptote or discontinuity at a particular value.  
  
**Sketch** : when applied to **diagrams**, implies that a simple, freehand drawing is acceptable; nevertheless, care should be taken over proportions and the clear exposition of important details.
- **State** : implies a concise answer with little or no supporting argument (explanation), e.g. a numerical answer that can be obtained 'by inspection'.
- **Suggest** : is used in two main contexts, i.e. either to imply that there is no unique answer, or to imply that candidates are expected to give logical answers by applying your knowledge and understanding of the subject to analyse "new" situations. Often, more than one answer is possible.  
*Example* : Suggest why droopy lettuce leaves become firm and crisp when dipped in cold water.  
*Expected answer* : Droopy lettuce leaves have insufficient water and the cells are in a state of low turgor. When dipped in cold water, water enters the plant cells by osmosis, causing them to swell and become turgid and thus, leaves become firm and crispy.
- **What is meant by** : normally implies that a definition should be given, together with some relevant comment on the significance or context of the term(s) concerned, especially where two or more terms are included in the question. The amount of supplementary comment intended should be interpreted in light of the indicated mark value.