

Full name:

Group:

PART ONE : READING :

Read the text carefully then do the activities

THE ORIGIN AND SOME BRANCHES OF BIOLOGY

In spite of the fact that Biology is generally regarded as a modern science, it draws on varied traditions, practices, and areas of inquiry beginning in **antiquity**. The 20th and 21st centuries have been **well-known** in the future generations as the beginning of “Biological **Revolution**”. Initiating with the explanation from Watson and Crick in 1953, all fields of Biology have expanded **exponentially** and touched every aspects of life. The word "Biology itself was and is now familiar with the living creatures or **organisms**. The word 'Biology" is adapted from the Greek words, “bios” that means life and “logos” that means science. Moreover, there are several branches of Biology that must be dealt with, three of which are biotechnology, embryology, and evolution.

Biotechnology

The first branch, biotechnology, is related to how the elements of living creatures (such as bacteria, fungi, virus, and so forth) are functioned and how to create particular products yielded from living creatures to produce other **profitable** products and services. The implementation of biotechnology results in several food products, like beer, cheese, yogurt, bread, and so forth. In addition to the food products, biotechnology is also functioned to support farming, animal **breeding** as well as reproduction and for the **fulfilment** of medical and health needs, for instance: vaccine, antibiotic, and insulin.

Embryology

Another well-known branch of Biology is embryology, which is familiar with the development of **embryo** before going to be a high-level creature with a complex structure of organs. It derives from two main words, embryo and logos, which means that it is a **discipline** that talks much about science of embryo. In addition, embryo is an early **unicellular** organism that will become the **prospective multicellular** before entering the birth stage.

Evolution

In essence, evolution talks about the change of **heritable** characteristics that are **transmitted** from the ancestors to the **successive** generations, which is generally named as evolutionary process. In this discourse, the main processes that trigger the occurrence of evolution are variance, reproduction, and natural selection. One out of those three processes, natural selection is the most known one, proposed by Charles Robert Darwin in his masterpiece entitled On the Origin of Species published in 1859.

Adopted from: Shebel, Melanie. 2016. Branches of Biology: Exploring Fields in Biology.

A/ Comprehension: (8pts)

1) Are the following sentences “True”, “False”, or “NM”? (2pts)

- a. Biotechnology is a branch of Biology that can be used to explain a fertilization process. **NM**
- b. Multi-cellular organism is more complex than unicellular one. **NM**
- c. Evolution is a study that talks about the change that occurs in animals. **NM**
- d. Biology has existed before 20th and 21st centuries. **T**

2) Answer the following questions based on the text: (4pts)

- a. At what century does the initiation of Biological Revolution occur within the future generation? (§1)
- **The initiation of Biological Revolution occur in the 20th and 21st C.**
- b. Who is the famous figure who attempts to explain the natural selection by his book? (§4)
- **Charles Robert Darwin.**
- c. What are the main aspects that influence the occurrence of evolution? (§4)
- **Variance, reproduction, and natural selection.**
- d. How does the implementation of Biotechnology help people to fulfill their needs? (§2)
- **Beer, cheese, yogurt, bread, and so forth. In addition to the food products, biotechnology is also functioned to support farming, animal **breeding** as well as reproduction and for the **fulfilment** of medical and health needs, for instance vaccine, antibiotic, and insulin.**

3) What is the difference between a sentence, a clause and a phrase: (2pts)

- **When you are writing a sentence, a clause is a complete thought that contains a subject and a verb. A phrase is a group of words that modifies the subjects and objects in the sentence to provide extra information, but it is not a complete thought.**

B. Grammar: (12pts)

1) Put these words in the right column based on their pronunciation: (8pts)

Generations – Aspects – Creatures – Products – Complexes – Fields – Approaches-Acknowledges-Absorbs-
Apologies-Boxes-Orders-Threatens-Copies-Expects-Truths

<i>/S/</i>	<i>/Z/</i>	<i>/Iz/</i>
<ul style="list-style-type: none">- Aspects- Products- Expects- Truths	<ul style="list-style-type: none">- Generations- Creatures- Fields- Absorbs- Orders- Threatens	<ul style="list-style-type: none">- Complexes- Approaches- Acknowledges- Apologies- Boxes- Copies

2) Rewrite the sentence B so that it means the same as sentence A: (4pts)

- 1.A. **Food is produced for everyone by the famers.**
- 2. A. **Ben walks the dog.**
- 3. A. **He opens the book.**
- 4.A. **The car was cleaned by Sam and Ben**



Do not stress, just do your best and let the results speak for themselves

