**ANATOMY ASSIGNMENT**

Botany is the scientific study of plants. This definition requires an understanding of the concepts “plants” and “scientific study”. It is a branch of Biology dealing with plant life, including their growth, structure, psychology, reproduction and pathology as well as their economic use and cultivation by humans.

**Importants of plants and examples of each importance**

**a] plants have had a key role in the history of the life on earth.**

They are responsible for the presence of oxygen, a gas needed for the most organisms that curently inhabit our planet and need it to breathe. Oxygen is also a byproduct of photosynthesis, a process of converting light energy to chemical energy and staring into bonds of sugar.

**b] Plants are the main source of food**

Everything we eat comes from directly or indirectly from plants. Throughout human history, approximately 7,000 different plant species have been used by people as food. Consider what our lives would be without chocolate, coffee, tea, sugar, vanilla, cinnamon, pepper, strawberries and other food, fruits, drinks and condiments we need in order to live.

**c] Plants are also provides of water**

plants regulate the water cycle; they help distribute and purify the plant`s water. Without water, Plants would not also be able to produce food since water is needed in the process of photosynthesis. Plants also move water the soil to the atmosphere through a process called transpiration.

**d] Plants provide habitat for organisms, people and animals.**

Of course, aside from humans` myriad uses, plants make up the backbone of all habitats. Other species of fish and wildlife also depend on plants for food and shelter, wood we also use in making our shelters also comes from the trunks of trees.

**e] Drugs are essential in providing us drugs or medicines.**

One-quarter of all prescription drugs come directly from or are derivatives of plants. Additionally four out of five people around the world today rely on plants for primary health care. An example of a plant used for medicine is the plant Aloe Vera, which is used for multiple skin treatments.

**Scientific methods and the steps involved**

Scientific method is a process of experimentation that is used to explore observations and answer questions. Scientists use the scientific method to search for cause and effect relationships in nature.

Hypothesis is false

Hypothesis is true

**DIFFERENT CONCEPTS OF UNDERSTANDING PLANT SCIENCE**

These concepts will make plant biology more understood; the numerous facts, figures names and data will be les overwhelming when you realize that they all fit into the patterns governed by a view fundamental concepts.

**i] Plant metabolism is based on the principles of chemistry and physics.** Weeds may seem to appear from nothing as if by magic whoever that is never true- they grow from seeds

**ii] Plants must have a means of storing and using information,** after seed germinates it grows and develops into a plant, becoming larger and more complex then it reproduces.

The plant is taking in energy and chemical compounds it uses to build more of itself. This requires a complex, carefully controlled metabolism, and there must be a mechanism for storing and using the information that regulates that metabolism. As you may already know, genes are the primary means of storing this information

**iii] Plants reproduce passing the genes and information onto the descendants.**

Because an individual obtains its genes from its parents, the information it uses to control its metabolism is similar to the information its parents had used; thus off springs and parents resemble each other. for example a bean seed contains genes whose information that guides the. seed`s metabolism constructing a new bean plant but a tomato seed grows into a tomato plant because it received different genes and information from its parents

iv] Plants must survive in their on environment. They must be adopted to the conditions in the areas where they live if they are not adopted to that area`s conditions, they grow and reproduce poorly or die permanently.

Other plants whose genes result in characters that make those plants more suited to live .