Lecture: 1 Human Biology First class

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- 1- The science of **Biology** "what is the science of biology"?
- 2- **Why study** the Biology is important?
- 3- The Definition of Biology and the clinical Biology?
- 4- The **Division** of Biology "which is the divisions of Biology"
 - ? " principle"
- 5- The some subdivision of Biology ? Explain **Five** subdivisions ?

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Biology is very important subject to be studied in order to have a full knowledge about all aspects of Earth's living things, including the dynamic processes within them that enable them to develop, survive and reproduce.

The science of biology, why study biology, definition of clinical biology and some subdivision of biology.

First, we must define biology, there are many definitions:

- The science that deals with living things.
- The science of variability.
- The science of life.

And the biology define it, is study all aspects of earth's living things, including the dynamic processes within them that enable them to develop, survive, and reproduce and those vital.

Processes include the harnessing energy and matter, the synthesis of the material that body, the healing of injuries, and the reproduction of the organism Among many other activities.

Biology is the scientific study of organisms or living things.

The term biology is derived from two Greek words (bios) means life, (logos) means science or study.

Biology are include :-

- 1- Zoology (animal biology)
- 2- Botany (plant biology)
- 3- Microbiology (bacteriology, mycology, virology and parasitology)
- 4- Algology (algaes and lichences)

There are sub - division of biology:

- 1- Morphology: study the external structure of the body.
- 2- Anatomy: study the internal structure of the organisms.

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- 3- Histology: microscopic study of the types of tissues that form the body organs.
- 4- Cell biology: study the compositions of the cell, and functions of its organelles.
- 5- Physiology, study the vital processes that done by the various body organs.
- 6- Embryology, study the stages of formation and growth of the embryo from fertilization to the complete formation of various body organs.
- 7- Ecology: study the relationships between organisms with each other, and relationships between the organisms and its environment.
- 8- Genetics: study the transference of hereditary feature from parents to the offspring and genetic variations.
- 9- Evolution: study the evolution and development of organism across the successive ages.
- 10-Taxonomy: it deals with classification of different organism to appropriate groups.
- 11-Molecular biology: this science explains the biology phenomena at molecular level base on chemical and physical means and materials to study the molecular structure of genes.
- 12-Natural history: study the organisms life and their behavior in the their natural environment.
- 13-Parasitology: study the organisms that live on or inside another organisms.
- 14-Pathology: study the nature and symptoms of diseases and their causes.

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- 15-Zoogeography: study the distribution of various animals in all over the earth.
- 16-Paleozoology: study the fossils animals.
- 17-Comparative anatomy: study the anatomical differences between animals.

Why study the biology is important?

The study of Biology is very important?

- 1. The study of Biology has helped mankind in finding cures to diseases by testing of animal.
- 2. Biology also helps us to known a greater understandings on how the world works .
- 3. Biology saves lives through medicine or even nutritional advice.
- 4. Biology is needed to study because it will use in life in reproduction, keeping a balanced diet and also how to keep healthy and how drugs and smoking can affect us.

Medical Biology:

Is a learning material for students of medicine with a cell biology, biochemistry, collection of most interesting facts on chemistry, neurophysiology, endocrinology, pharmacology and more microbiology, pathophysiology.

The End