INTRODUCTION TO ZOOLOGY

By :- RAJKISHORE PUHAN

The term **Science** has been derived from a Latin word **Scientia**.

BRANCHING OF SCIENCE:

SCIENCE

SOCIAL SCIENCE

- Sociology
- Civics
- Political Science Etc.

ABSTRACT SCIENCE

Mathematics

PHYSICAL SCIENCE

(Science of Non-livings)

- Physics
- Chemistry
- Geology

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BIOLOGICAL SCIENCE (Science of Livings)

- Botany
- Zoology
- Microbiology

NATURAL SCIENCE

The term BIOLOGY was first proposed by Lamarck & Treviranus.

The term BIOLOGY has been derived from 2 Greek words i.e. **bios**(Life) & **logos**(study).

Tather of Biology-Aristotle.

BIOLOGY

BOTANY

- Study of Plants
- Father of Botany"Theophrastus"
- •Otherwise known as "Phytology".

ZOOLOGY

- Derived from 2 Greek words zoon(animal) & logos
- Study of Animals
- Father of Zoology "Aristotle"

MICROBIOLOGY

- Study of Micro organisms
- •Father of Microbiology "Louis Pasteur"

BRANCHES OF ZOOLOGY:-

- Morphology: Study of external structures of living organisms.
- Anatomy :- Study of structure of internal organs.
- Physiology :- Study of working mechanism of different parts of the body.
- Cytology :- Study of structures & functions of the cell.
- ➢ Histology :- Study of tissues.
- Genetics :- Study of transmission of characters from one generation to the next generation.
- Ecology :- Study of inter-relationship between living organisms & its environment.
- Taxonomy :- Study of identification, classification & nomenclature of living organisms

- Embryology :- Study of development of embryos.
- Palaeontology :- Study of fossils.
- Ethology :- Study of animal behaviours.
- Endocrinology :- Study of structure & function of Endocrine System.
- Gerentology :- Study of ageing.
- Arthrology :- Study of joints.
- Osteology :- Study of bones.
- Chondrology :- Study of cartilages.
- Myology /Sarcology :- Study of muscles.
- ②Opthalmology :- Study of eyes.
- Cardiology :- Study of functions & diseases of heart.

- Angiology :- Study of blood vessels & lymph vessels.
- Rhinology :- Study of nose.
- Tricology :- Study of hairs.
- ➢Odontology :- Study of teeth.
- ➢ Oncology :- Study of cancer.
- Haematology:- Study of blood.
- Dermatology :- Study of skin.
- ➢ Kalology :- Study of human beauty.
- Craniology :- Study of skull.
- Pedology :- Study of soil.
- Limnology :- Study of water.

- ➢ Icthyology :- Study of fishes.
- Ornithology :- Study of birds.
- Mammology :- Study of mammals.
- Herpetology :- Study of reptiles.
- Ophiology :- Study of snakes.
- Saurology :- Study of lizards.
- Entomology :- Study of insects.
- Helminthology:- Study of worms.
- Virology :- Study of viruses.
- ➤ Karyology :- Study of cell nucleus.
- ➢ Hepatology :- Study of liver.

- Anthology :- Study of flowers.
- 🖎 Bacteriology :- Study of bacteria.
- Pomology :- Study of fruits.
- Malacology :- Study of molluscs.
- © Conchology :- Study of molluscan shells.
- Cryobiology :- Study of effects of low temperature on living organisms.
- Parasitology :- Study of parasites.
- Parazoology :- Study of sponges.
- Phycology :- Study of algae.
- Protozoology :- Study of protozoa.
- Pteridology :- Study of ferns.

- Enzymology :- Study of enzymes.
- **Zymology** :- Study of fermentation.
- Serology :- Study of blood serum.
- ☐ Gynaecology :- Study of female reproductive system.
- Andrology :- Study of male reproductive sytem.
- ☼ Otology :- Study of ears.
- Sonology :- Study of hearing.
- Melanology :- Study of skin pigments.
- Hypnology :- Study of sleep.
- Splanchnology:- Study of Visceral organs.
- ☑ Immunology :- Study of body defence &resistance to infections.

SOME IMPORTANT NAMES IN THE FIELD OF ZOOLOGY

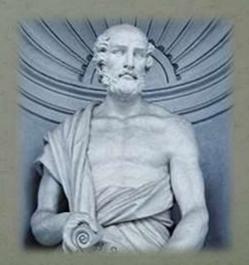
Aristotle :- Father of Biology

Father of Zoology

Father of Embryology



Theophrastus :- Father of Botany



Louis Pasteur :- Father of Microbiology

◯ G.J.Mendel :- Father of Genetics

Alexander Fleming :- Father of Anti-biotics



Carolus Linnaeus :-Father of Taxonomy

Bichat :- Father of Histology



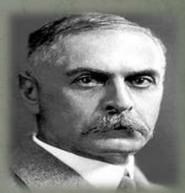
A.V. Leeuwenhoek :- Father of Microscopy



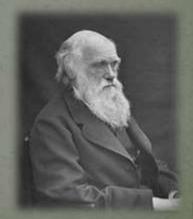
William Harvey:- Father of Blood Circulation



Karl Landsteiner :- Father of Blood Groups



Charles Darwin: - Father of Evolution



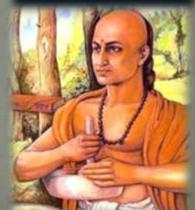
Hippocrates :- Father of Medicine

Robert Hooke :- Father of Cytology

Charak :- Father of Ayurveda







Ivan Pavlov :- Father of Conditional Reflex

Einthoven :- Father of ECG(Electro Cardiogram)

Edward Jenner :- Father of Immunology



Thomas Addison :- Father of Endocrinology

Micheli:- Father of Mycology

Stanley:- Father of Virology





Susruta :- Father of Surgery

Norman Borlaug :- Father of Green Revolution

Alec Jefferys:- Father of DNA fingerprinting

