

Board – ICSE

Class – 9

Topic – INTRODUCING BIOLOGY

1. Define Science.

**Ans.** Science is an organized body of knowledge supported by observation and experimentation derived from the study of natural phenomena of the entire material universe.

2. Answer the following questions:

(i) Who is known as father of Biology?

**Ans.** Aristotle (384-322 B.C)

(ii) Name the technique of growing fish.

**Ans.** Pisciculture

(iii) Study of internal structure of organism called as-

**Ans.** Anatomy

(iv) Study of insect is called as-

**Ans.** Entomology

(v) Study of cell is called as-

**Ans.** Cytology

3. Match the Column A with Column B

**Column A**

(a) Ichthyology

(b) Ornithology

(c) Ecology

(d) Virology

(e) Herpetology

(f) Paleontology

(g) Cytology

(h) Pathology

**Column B**

(1) Virus

(2) Fishes

(3) Birds

(4) Cells

(5) Diseases

(6) Fossils

(7) Snakes

(8) Environment

**Ans.** A → 2, b → 3, c → 8, d → 1, e → 7, f → 6, g → 4, h → 5.

4. Define the following terms:

a) Biotechnology

b) Bioinformatics

c) Genetics

d)

immunology

- Ans.** a) **Biotechnology:** branch of science which uses the living cell or micro-organism in technology for the production of desired product like biogas production, antibiotic, antibodies etc.
- b) **Bioinformatics:** management and analysis of biological information stored in database.
- c) **Genetics:** study of inheritance, i.e. transfer of hereditary character from parent to offspring.
- d) **Immunology:** the science that deals with the phenomenon and causes of immunity.

4. Fill in the blanks:

- 1) \_\_\_\_\_ is the out of growing fruits, vegetables, flowers or ornamental plants.
- 2) Sericulture is the technique of producing \_\_\_\_\_ by raising \_\_\_\_\_.
- 3) Nuclear biology deals with the effect of \_\_\_\_\_ on living things.
- 4) Organism which draw food from the host body are called \_\_\_\_\_
- 5) \_\_\_\_\_ is the science of naming and classifying organisms.

- Ans.** 1) Horticulture                      2) Silk, silkworm                      3) Radioactivity
- 4) Parasite                                  5) Taxonomy.

5. Enumerate from branches of biology in term of special group of organism.

- Ans.** (1) Bacteriology                      (2) Virology                                  (3) Mycology                                  (4) Entomology

6. What is the significance to study Biology?

**Ans.** Following are the significance to study Biology-

- Appreciation of Nature
- Keeping organism healthy.
- Conservation of natural resources.
- Increase in food production.
- To control population growth.
- Provide job to many individuals.

7. What is Biogeography?

**Ans.** It is branch of science which deals with the study of geographical distribution of plants and animals.

8. Give the difference between following.

- 1) Anatomy and Morphology    2) Parasitology and Pathology    3) Biochemistry and Bioengineering

**Ans.**

1)

Anatomy	Morphology
Study of internal structure of organism	Study of external features of organism

2)

Parasitology	Pathology
Parasitology is the science deals with the study of parasite	Pathology is the study of diseases of plants and animals.

3)

Biochemistry	Bioengineering
Biochemistry is the study of chemicals and reactions that takes place inside the living things.	Bioengineering includes techniques like the making and artificial organs, modification of crop and improving their quality.

9. What is Exobiology?

**Ans.** Exobiology is one of the newest sciences, which contemplates to study life elsewhere in the universe.