

**ICSE Board**  
**Class IX Biology**  
**Paper - 1**

**Time: 2 hrs**

**Total Marks: 80**

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**General Instructions:**

1. *Answers to this paper must be written on the paper provided separately.*
  2. *You will **not** be allowed to write during the first **15** minutes. This time is to be spent in reading the question paper.*
  3. *The time given at the head of the paper is the time allotted for writing the answers.*
  4. *Attempt **all** questions from **Section I** and **any four** questions from **Section II**.*
  5. *The intended marks of questions or for parts of questions are given in brackets [ ].*
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**SECTION-I (40 Marks)**

*Attempt **all** questions from this section.*

**Question 1**

(a) Name the following:

- (i) The basic unit of life.
- (ii) The causative agent of AIDS.
- (iii) An animal which belongs to Phylum Mollusca.
- (iv) A substance which contains an antitoxin.
- (v) A group of organisms that lack chlorophyll. [5]

(b) Select one suitable term from the brackets and fill in the blanks:

- (i) The female reproductive part of a flower is the \_\_\_\_\_. [carpel, stamen, corolla]
- (ii) *Vallisneria* is pollinated by \_\_\_\_\_. [water, air, animals]
- (iii) \_\_\_\_\_ is a false fruit. [Mango, Apple, Grape]
- (iv) The joint present in the elbow is the \_\_\_\_\_ joint. [ball and socket, hinge, pivot]
- (v) The branch of science that deals with the study of cell and its function is \_\_\_\_\_. [Botany, Ecology, Cytology] [5]

(c) State one point of difference between the following pairs on the basis of what is indicated in the brackets.

- (i) Parasitic and saprophytic nutrition [definition]
- (ii) Centrosome and chromosome [location]
- (iii) Algae and fungi [mode of nutrition]
- (iv) Respiration and photosynthesis [product formed]
- (v) Stomata and lenticels [guard cells] [5]

(d) Define:

- (i) Pollination
- (ii) Apocarpous gynoecium
- (iii) Incubation period
- (iv) Antibiotics
- (v) Peristalsis

[5]

(e) State whether the following are True or False. Correct and rewrite the statements

- (i) Cross-pollination requires abiotic or biotic agents.
- (ii) In mammals, the neck contains eight vertebrae.
- (iii) Keratin gives colour to the skin.
- (iv) Fats are non-essential components of food.
- (v) All bacteria are useful to man.

[5]

(f) Complete the table:

Name of the disease	Causative agent	Preventive measure
1. Whooping cough		
2. Tetanus		
3. Malaria		
4. AIDS		
5. Diphtheria		

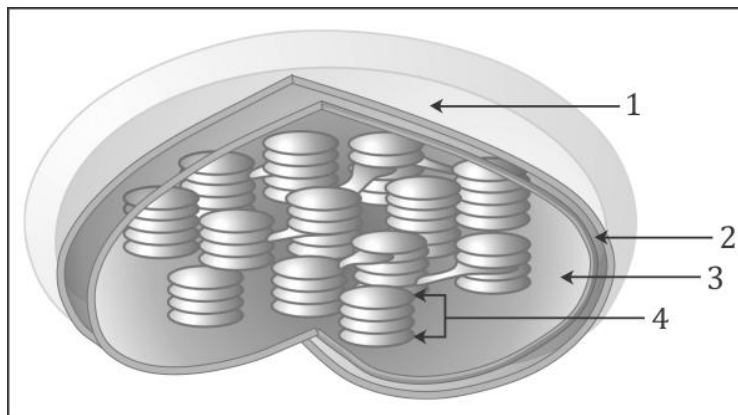
[5]

(g) Give one example of each:

- (i) A mammal which destroys stored grain.
- (ii) A flightless bird.
- (iii) The young one of a fish.
- (iv) An antibiotic.
- (v) A plant which propagates by leaves.

[5]

(h) The given figure shows a cell organelle.



- (i) Name the cell organelle.
- (ii) In which type of cell is this structure present?
- (iii) What is the function of this structure?
- (iv) Label parts 1-4.

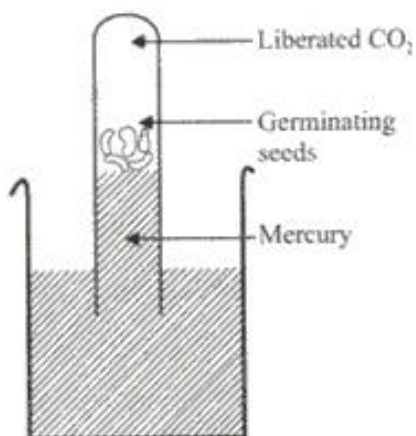
[5]

## SECTION-II (40 Marks)

Attempt any **four** questions from this section.

### Question 2

(a) The given figure shows an experiment performed on germinating seeds.



- (i) What does the experimental set-up demonstrate?
- (ii) Redraw the figure as it would have been observed at the start of the experiment.
- (iii) Write the chemical equation for the process.

[5]

**(b)** Write the functions of:

- (i) Stigma
- (ii) Chromosomes
- (iii) Phloem
- (iv) Sweat gland
- (v) Roughage

[5]

### Question 3

**(a)** Write the full forms of:

[5]

- (i) AIDS
- (ii) BCG
- (iii) DPT
- (iv) WHO
- (v) WBC

**(b)** Define:

- (i) Cross pollination
- (ii) Immunity
- (iii) Thallophyta
- (iv) Radial symmetry
- (v) Yeast

[5]

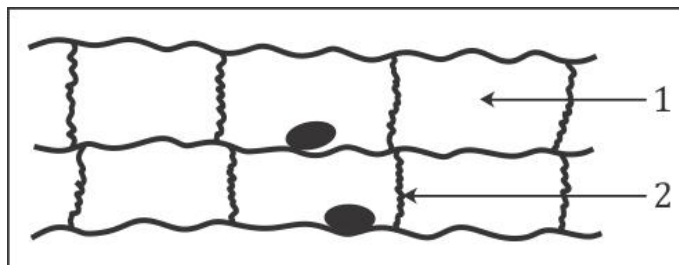
### Question 4

**(a)**

- (i) State the role of nitrifying bacteria.
- (ii) State three harmful effects of bacteria.

[5]

**(b)** The given figure shows a type of muscle.

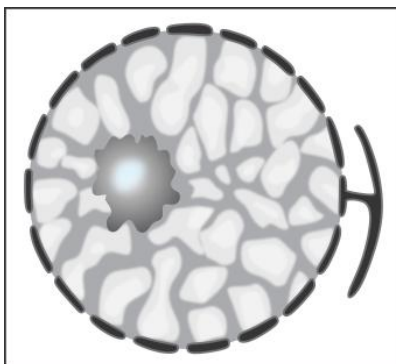


- (i) Identify the muscle.
- (ii) Label parts 1 and 2.
- (iii) Where is it located?
- (iv) What are the characteristics of this tissue?

[5]

### Question 5

(a) The given figure shows a certain structure of a cell.



- (i) Name the structure.
- (ii) Why is this structure important for the cell?
- (iii) Is this structure present in all cells? If not, mention the cell that lacks this structure.

[5]

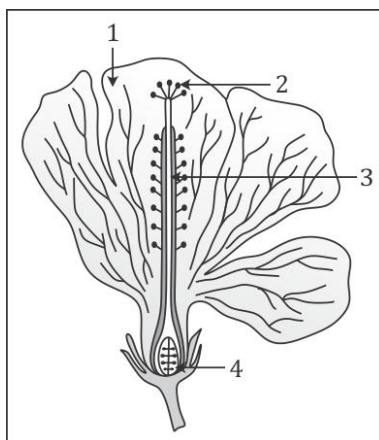
(b)

[5]

- (i) List any three health problems in India.
- (ii) State two functions of WHO.

### Question 6

(a) The given figure shows the L.S. of a flower.



- (i) Name the flower.
- (ii) Label parts 1-4.
- (iii) Explain the mechanism of pollination in the above flower.

[5]

(b) Write an experiment to prove that air, water and temperature are needed for the germination of seeds.

[5]

### **Question 7**

**(a)**

- (i) List the merits of local defence systems.
- (ii) How will you control mosquitoes? [5]

**(b)**

- (i) State three characteristics of fish.
- (ii) Draw the structure of a maize grain. [5]