

**ICSE Board**  
**Class IX Biology**  
**Paper - 3**

**Time: 2 hrs**

**Total Marks: 80**

---

**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 [ ].
- 

**SECTION-I (40 Marks)**

Attempt **all** questions from this section.

**Questions: 1**

**(a)** Choose the correct answer and complete the following statements:

- (i) Human cells contain \_\_\_\_\_ of chromosomes.  
(a) 12 pairs (b) 24 pairs (c) 23 pairs
- (ii) \_\_\_\_\_ is an underground stem.  
(a) *Dahlia* (b) Ginger (c) Sweet potato
- (iii) Heat-regulating centre is located in the \_\_\_\_\_.  
(a) medulla oblongata (b) hypothalamus (c) cerebellum
- (iv) A food chain begins with \_\_\_\_\_.  
(a) green plants (b) tiger (c) cow
- (v) Haemophilia is a \_\_\_\_\_ disease.  
(a) metabolic (b) genetic (c) allergic

[5]

**(b)** State whether the given statements are True or False:

- (i) Keratin gives colour to the skin.
- (ii) Potato tuber has stomata.
- (iii) Transpiration takes place through stomata.
- (iv) Body cavity is absent in Platyhelminthes.
- (v) Molar teeth are used for tearing the food.

[5]

**(c)** Name the following:

- (i) The membrane surrounding the vacuole.
- (ii) The components of xylem.
- (iii) The enzyme present in saliva.
- (iv) A disease caused by bacteria.
- (v) The tissue responsible for conduction of food in plants .

[5]

**(d)** Find the odd one out and mention the category for the rest:

- (i) Pine, *Chlamydomonas*, *Spirogyra*, *Volvox*
- (ii) Cell wall, Centrosome, Plastid, Ribosomes
- (iii) Vegetable peel, Plastic, Discarded CDs, Metals
- (iv) Cholera, Leprosy, Syphilis, Jaundice
- (v) Horse, Camel, Rabbit, Platypus

[5]

**(e)** State the functions of each of the following:

- (i) Epiglottis
- (ii) Sepals
- (iii) Chloroplasts
- (iv) Endosperm
- (v) Golgi bodies

[5]

**(f)** Match the following:

[5]

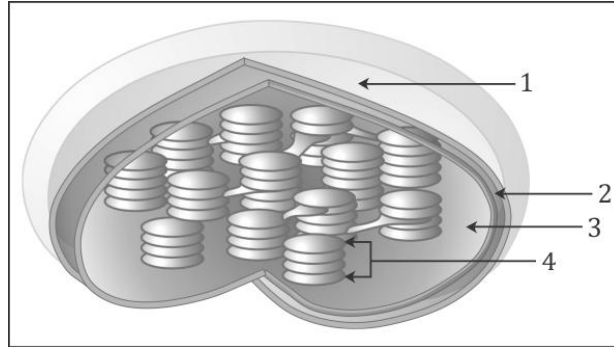
Column A	Column B
(i) Absorption and secretion in intestines	Have a dorsal nerve cord
(ii) Chordates	Open circulatory system with jointed legs
(iii) Amphibia	Deficiency of oxygen reaching the tissues
(iv) Arthropoda	Possess three-chambered heart
(v) Hypoxia	Columnar epithelium

**(g)** Give one example each:

- (i) A mammal which destroys stored grains
- (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

[10]

**(a)**

- (i) Why do seeds require water for germination?
- (ii) What does STD stand for? Is syphilis an STD?

**(b)** With the help of a diagram, explain the process of grafting.

### Question 3

[10]

**(a)**

- (i) State the uses of bacteria.
- (ii) Define fertilisation.

**(b)**

- (i) How does the skin help in temperature regulation?
- (ii) State the function of sebaceous glands.
- (iii) Name the pigment present in skin.

### Question 4

[10]

**(a)**

- (i) Why is public cleanliness important for individual health?
- (ii) Can a cell survive if its cytoplasm is removed? Give reason for your answer.

**(b)** Differentiate between a plant cell and an animal cell.

### Question 5

[10]

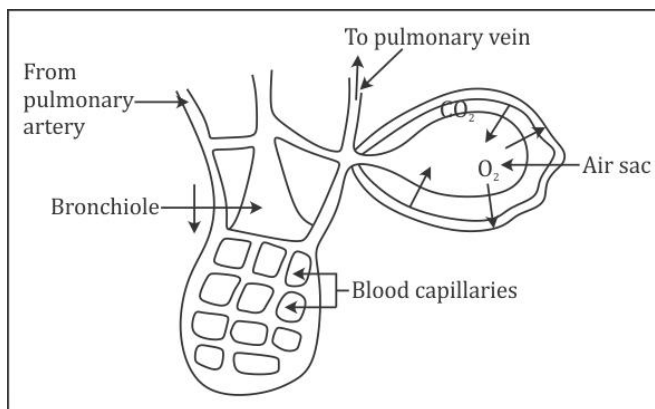
**(a)** How does spore formation take place in fungi?

**(b)** Differentiate between viruses and bacteria.

### Question 6

[10]

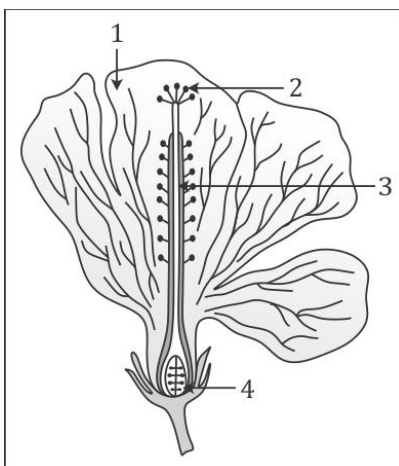
(a) Observe the given diagram and answer the following questions:



- (i) Name the process explained in the given diagram.
- (ii) What type of air is present in the bronchioles?
- (iii) What type of blood does the pulmonary artery contain?
- (iv) What type of blood does the pulmonary vein contain?
- (v) Name the corresponding structure found in plants.

(b)

- (i) The given figure shows a type of ovary.



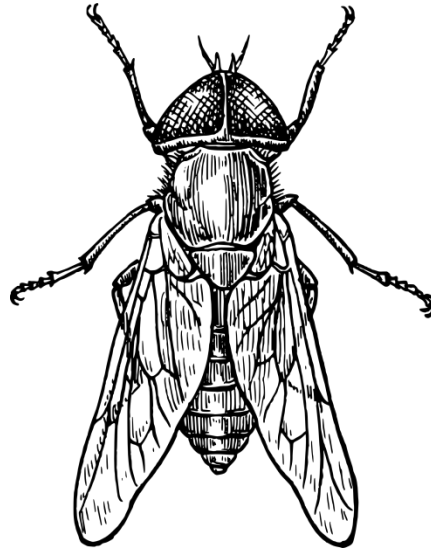
- 1. Name the type of ovary.
  - 2. Give reasons to support your answer.
  - 3. Name a plant in which this type of ovary is present.
- (ii) Is the micropyle important for a seed? Give reasons to support your answer.

**Question 7**

[10]

**(a)**

- (i) What is malaria? How is it caused?
- (ii) Study the given figure and answer the questions based on it.



- 1. Name the insect.
- 2. Name the disease spread by this insect.
- 3. How does it spread diseases?

**(b)**

- (i) Give reason: A bat can fly, yet it is not a bird.
- (ii) Explain the process of cheese manufacturing.