

ICSE Board
Class IX Biology
Paper - 5

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 [].
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SECTION-I (40 Marks)

Attempt **all** questions from this section.

Questions: 1

(a) Name the following:

- (i) The structure which prevents food from entering the trachea during swallowing.
- (ii) The condition in which the calyx and the corolla cannot be distinguished.
- (iii) The sheath covering the radicle of maize grain.
- (iv) Parasites within the body of a host.
- (v) The space present in between the incisors and premolars. [5]

(b) Choose the odd one out:

- (i) Centrosome, Ribosome, Cell membrane, Mitochondria
- (ii) Trachea, Mouth, Pharynx, Larynx
- (iii) Glucose, Sucrose, Galactose, Fructose
- (iv) Scabies, Sleeping sickness, Malaria, Amoebic dysentery
- (v) Animal feed, Bagasse, Animal waste, Plastic packing [5]

(c) Complete the following:

- (i) Anaerobic respiration produces _____ in human beings.
- (ii) _____ is the incomplete breakdown of organic matter by bacteria.
- (iii) The inactive state of an embryo is known as _____ in plants.
- (iv) _____ is made up of glucose and galactose.
- (v) Emulsification of fats by the bile takes place in the _____. [5]

(d) State whether the following statements are True or False:

- (i) Coconut is a dry fruit.
- (ii) Insects have two pairs of legs.
- (iii) Fungi reproduce by producing spores.
- (iv) Intercostal muscles help in internal respiration.
- (v) Earthworms are hermaphrodites.

[5]

(e) Given below is an example of a certain structure and its special function. Based on a similar pattern, fill in the given blanks.

E.g. Chloroplast – Photosynthesis

[5]

(i) Ribosome	
(ii) Centrosome	
(iii) Haustoria	
(iv) Epiglottis	
(v) Glenoid cavity	

(f) State two differences between each of the following pairs.

- (i) Prokaryotic and eukaryotic cell
- (ii) Respiration and breathing
- (iii) Parenchyma and sclerenchyma
- (iv) Striated and unstriated muscles
- (v) Sweat and sebum

[5]

(g) Find the odd one out:

- (i) Glass lenses, Arm, Mirror, Magnets
- (ii) Sieve tubes, Tracheids, Vessels, Xylem parenchyma
- (iii) Egg, Larva, Nymph, Pupa
- (iv) Polyadelphous, Diadelphous, Polysepalous, Monadelphous
- (v) Tube nucleus, Synergids, Antipodal cells, Polar nucleus

[5]

(h) Match the columns:

[5]

Column A	Column B
(i) Ecology	Fishes
(ii) Ichthyology	Snakes
(iii) Cytology	Environment
(iv) Ornithology	Cells
(v) Herpetology	Birds

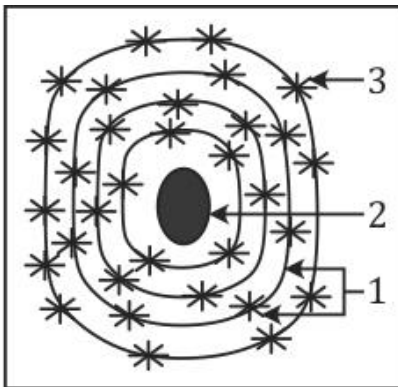
SECTION-II (40 Marks)

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

Question 2

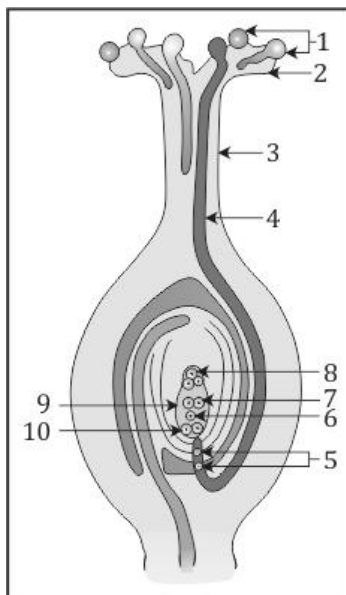
[10]

(a) Study the given figure and answer the questions based on it:



- (i) What does the given figure show?
- (ii) Label parts 1-3.
- (iii) Where in the body can you see this structure?
- (iv) What is the function of part 1?

(b) The given figure shows the L.S. of an ovary at the time of fertilisation. Study the figure and answer the questions based on it.



- (i) Label parts 1-10.
- (ii) Define triple fusion.
- (iii) What happens to part 6 and 7?

Question 3

[10]

(a)

- (i) State two differences between cartilaginous fish and bony fish.
- (ii) State the symptoms of cholera, mumps and rabies.

(b) Explain the structure of a tooth with a neat, labelled diagram.

Question 4

[10]

(a)

- (i) What is an epidemic disease? Give one example.
- (ii) What is placentation? Name the different types of placentation.

(b)

- (i) State two characteristics of Phylum Porifera.
- (ii) State three disadvantages of vegetative propagation.

Question 5

[10]

(a)

- (i) How is the ileum adapted for the absorption of digested food?
- (ii) Why is it that seeds that are sown very deep inside the soil fail to germinate?

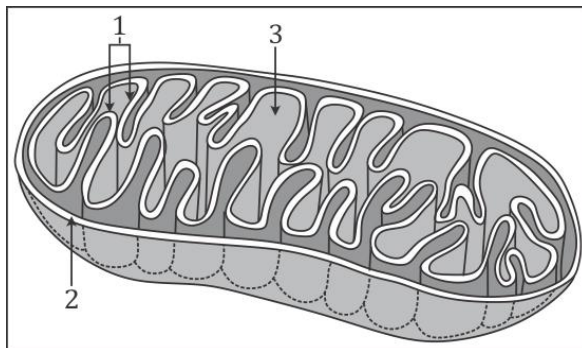
(b)

- (i) How is viviparous germination different from normal (hypocotyl/epicotyl) germination?
- (ii) Mention three ways in which the eyes can be protected from infection.

Question 6

[10]

(a) The given figure shows the structure of an organelle.



- (i) Name the organelle.
- (ii) Label parts 1-3.
- (iii) Mention one function of the above organelle.

(b)

- (i) How do bacteria survive in unfavourable conditions?
- (ii) What is anaerobic respiration? Write an equation for it.

Question 7

[10]

(a)

- (i) What are communicable diseases? Give two examples.
- (ii) Write the full form of: BCG, AIDS and DTP vaccine.

(b)

- (i) What is the function of a seed to the plant?
- (ii) Why does a fresh seed from a plant fail to germinate?
- (iii) Why are proteins an essential part of our diet?