

ICSE SEMESTER 2 EXAMINATION
SPECIMEN QUESTION PAPER
BIOLOGY
(SCIENCE PAPER 3)

Maximum Marks: 40

Time allowed: One and a half hours

Answers to this Paper must be written on the paper provided separately.

You will not be allowed to write during the first 10 minutes.

This time is to be spent in reading the question paper.

The time given at the head of this Paper is the time allowed for writing the answers.

*Attempt **all** questions from **Section A** and **any three** questions from **Section B**.*

The intended marks for questions or parts of questions are given in brackets [].

SECTION A

*(Attempt **all** questions.)*

Question 1

Name the following by choosing the correct answers to the questions from the given options. (Do not copy the question, Write the correct answer only.)

[10]

(i) A muscular wall is absent in:

- (a) Capillary
- (b) Vein
- (c) Venule
- (d) Arteriole

(ii) The outermost layer of meninges:

- (a) Piamater
- (b) Arachnoid layer
- (c) Grey matter
- (d) Duramater

- (iii) Tear gland is also called:
- (a) Gastric gland
 - (b) Lacrimal gland
 - (c) Salivary gland
 - (d) Sebaceous gland
- (iv) Which one of the following is not a simple reflex?
- (a) Coughing
 - (b) Blinking
 - (c) Eating
 - (d) Swallowing
- (v) Loop of Henle lies in:
- (a) Medulla
 - (b) Cortex
 - (c) Pelvis
 - (d) Ureter
- (vi) The pigment that gives colour to urine:
- (a) Haemoglobin
 - (b) Chlorophyll
 - (c) Urochrome
 - (d) Melanin
- (vii) The number of spinal nerves in humans:
- (a) 12 pairs
 - (b) 23 pairs
 - (c) 31 pairs
 - (d) 10 pairs

(viii) The mineral element needed for the functioning of the Thyroid gland:

- (a) Sodium
- (b) Potassium
- (c) Magnesium
- (d) Iodine

(ix) The part of the brain concerned with memory:

- (a) Cerebrum
- (b) Cerebellum
- (c) Pons
- (d) Medulla Oblongata

(x) The pigmented circular area seen in front of the eye:

- (a) Cornea
- (b) Lens
- (c) Iris
- (d) Ciliary muscles

SECTION B

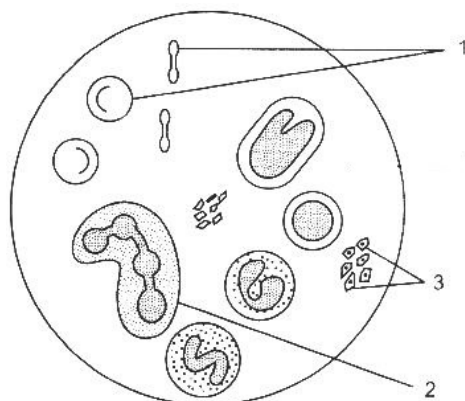
*(Attempt **any three** questions from this Section.)*

Question 2

(i) Explain the term 'Tropic hormone'. Give one example of a Tropic hormone. [2]

(ii) Give the location of Pericardial fluid. What is its function? [2]

(iii) Given below is the diagram of a human blood smear. Label the parts numbered 1, 2 and 3. [3]



(iv) Give the biological terms for the three ear ossicles. [3]

Question 3

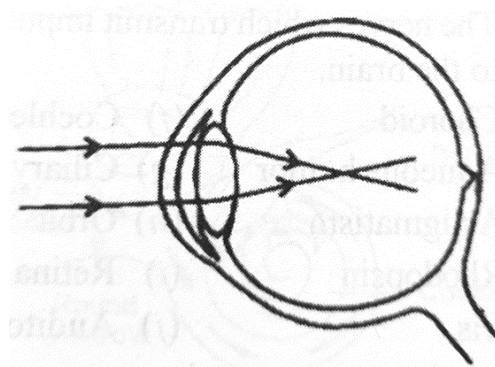
- (i) Mention two structural differences between an artery and a vein. [2]
- (ii) Where is Bicuspid valve located? What is its function? [2]
- (iii) Draw a neat diagram of a Malpighian capsule and label any two parts. [3]
- (iv) Define the term 'Excretion'. Which are the two main organic wastes present in urine? [3]

Question 4

- (i) Name the substance that initiates blood clotting. [2]
What is the mineral element essential to form a blood clot?
- (ii) Give the exact location of Adrenal glands. [2]
- (iii) Mention three functions of Adrenaline. [3]
- (iv) What is the contraction phase of auricles called? [3]
Name the two valves that open during this phase.

Question 5

- (i) How are cytons and axons arranged in the spinal cord. [2]
- (ii) We cannot distinguish colours in dim light. Explain giving suitable reasons. [2]
- (iii) Given below is a diagram depicting a defect of the human eye. [3]
Answer the questions that follow:



- (a) Give the scientific term for the defect.
- (b) Mention one possible reason for the defect.
- (c) What type of lens can be used to correct the defect?
- (iv) What are hormones? Name any two hormones secreted by the Pituitary gland? [3]

Question 6

(i) From where the following nerves arise. [2]

(a) Optic nerve

(b) Auditory nerve

(ii) Give the full form of the following abbreviations: [2]

(a) T S H

(b) A D H

(iii) What are the three main parts of the membranous labyrinth. [3]

(iv) Complete the following table by filling in the blanks (a) to (c): [3]

GLAND	HORMONE SECRETED	EFFECT OF OVERSECRETION
Pancreas	(a) _____	Hypoglycemia
Thyroid	(b) _____	(c) _____