

**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

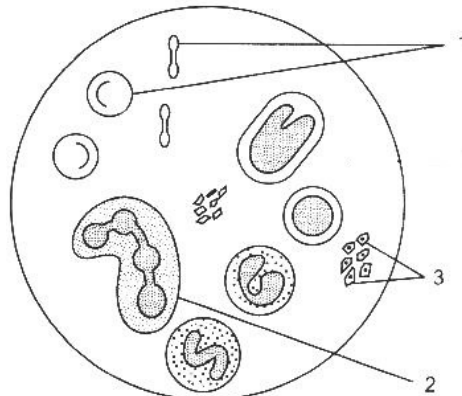
*(Attempt any three questions from this Section.)*

### 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

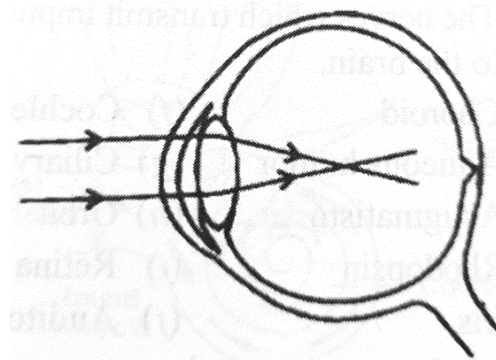
- (i) Mention two structural differences between an artery and a vein. [2]
- (ii) Where is Bicuspid valve located? What is its function? [2]
- (iii) Draw a neat diagram of a Malpighian capsule and label any two parts. [3]
- (iv) Define the term 'Excretion'. Which are the two main organic wastes present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

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