

ICSE SEMESTER 2 EXAMINATION  
**SAMPLE QUESTION PAPER**  
**BIOLOGY**  
**(SCIENCE PAPER 3)**

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**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.*

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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 [ ].*

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**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) The component of blood that checks its clotting in an intact blood vessel:
- |            |                |
|------------|----------------|
| a. Plasma  | b. Thrombin    |
| c. Heparin | d. Haemoglobin |
- (ii) Centre for maintaining posture and balance of the body:
- |                |               |
|----------------|---------------|
| a. Pons        | b. Cerebellum |
| c. Spinal cord | d. Cerebrum   |
- (iii) The photoreceptor cells of retina sensitive to colours:
- |              |                   |
|--------------|-------------------|
| a. Cones     | b. Rods           |
| c. Photopsin | d. Organ of Corti |
- (iv) The dorsal root ganglion of the spinal cord contains the cell bodies of:
- |                        |                       |
|------------------------|-----------------------|
| a. Motor neuron        | b. Sensory neuron     |
| c. Intermediate neuron | d. Association neuron |
- (v) Which blood vessel takes blood away from the kidney?
- |                       |                       |
|-----------------------|-----------------------|
| a. Renal portal vein  | b. Renal vein         |
| c. Afferent arteriole | d. Efferent arteriole |
- (vi) In kidney tubules, sodium reabsorption occurs under the influence of:
- |                        |                |
|------------------------|----------------|
| a. Renin               | b. ADH         |
| c. H <sup>+</sup> ions | d. Aldosterone |
- (vii) The body function not controlled by sympathetic nervous system:
- |                           |                                  |
|---------------------------|----------------------------------|
| a. Decrease of salivation | b. Increase of heart beat        |
| c. Dilation of pupil      | d. Increased rate of peristalsis |

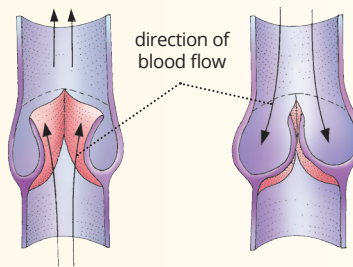
- (viii) Hormone that can cause acromegaly when secreted in high amount:
- |                   |              |
|-------------------|--------------|
| a. Thyroxine      | b. TSH       |
| c. Growth hormone | d. Adrenalin |
- (ix) Controlling centre of voluntary function speech:
- |             |                      |
|-------------|----------------------|
| a. Cerebrum | b. Cerebellum        |
| c. Pons     | d. Medulla oblongata |
- (x) Part of eye responsible for refraction of light:
- |                  |           |
|------------------|-----------|
| a. choroid layer | b. retina |
| c. cornea        | d. iris   |

## SECTION B

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

### Question 2

- (i) What is suprarenal gland? Name two major hormones of this gland. [2]
- (ii) What is pulmonary circulation? Which blood vessels take part in this blood circulation? [2]
- (iii) Given below is a type of blood vessel. [3]
- Answer the questions that follow:



- |  |  |
|--|--|
| a. Name the kind of blood vessels shown.               |  |
| b. Name the structures shown inside the blood vessels. |  |
| c. Describe the role of these structures.              |  |
- (iv) Name the parts of ear that are responsible for hearing and maintaining balance. [3]

### Question 3

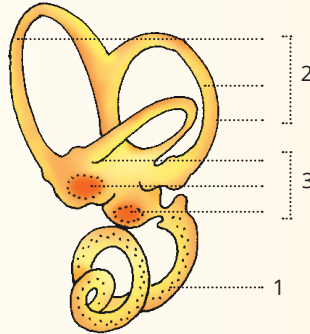
- (i) From where do the following blood vessels carry blood? [2]
- |                 |                        |
|-----------------|------------------------|
| a. Hepatic vein | b. Hepatic portal vein |
|-----------------|------------------------|
- (ii) Which heart chamber receives oxygenated blood and which chamber pumps oxygenated blood? [2]
- (iii) Draw a labeled diagram of the human excretory system. [3]
- (iv) Name and define the process that occurs in the glomerulus. [3]

### Question 4

- (i) Name the blood groups known as universal donor and universal recipient. [2]
- (ii) Give two characteristic features of hormones. [2]
- (iii) State three functions of thyroxine. [3]
- (iv) List three differences between blood and lymph. [3]

**Question 5**

- (i) Give two examples of reflex actions from our daily life. [2]
- (ii) What are the differences between myopia and hypermetropia? [2]
- (iii) Given below is a diagram represents a part of the human ear. Label the parts numbered 1, 2 and 3. [3]



- (iv) What are endocrine glands? Name any four endocrine glands present in the human body. [3]

**Question 6**

- (i) Mention the characteristics of the image that falls on the retina of the eye. [2]
- (ii) Write full form and one function for each of the following hormones: [2]
  - a. ACTH
  - b. GTH
- (iii) Given below is a table. Complete the table by filling the blanks. [3]

Endocrine Gland	Hormone	Function
Pancreas	a.	Helps in the conversion of glucose to glycogen
b.	c.	Controls contraction of muscles of uterus at the time of childbirth.

- (iv) Name the three meninges which cover the brain. [3]