

## **Question 1:**

**(i) The mineral element in hemoglobin:**

- (a) Manganese
- (b) Iron
- (c) Sodium
- (d) Calcium

**(ii) The number of cranial nerves in humans are:**

- (a) 12
- (b) 31 pairs
- (c) 31
- (d) 12 pairs

**(iii) Gigantism and Acromegaly are due to:**

- (a) Hypersecretion of Growth hormone
- (b) Hypersecretion of Thyroxine
- (c) Hypersecretion of growth hormone
- (d) Hyposecretion of Thyroxine

**(iv) Pericardium covers the:**

- (a) Heart
- (b) Brain
- (c) Spinal cord
- (d) Eyeball

**(v) The circular opening in the centre of iris:**

- (a) Lens
- (b) Cornea
- (c) Sclera
- (d) Pupil

**(vi) The blood vessel that carries oxygenated blood is:**

- (a) Pulmonary artery
- (b) Pulmonary vein
- (c) Renal vein
- (d) Hepatic vein

**(vii) Organ of corti is present inside the:**

- (a) Cochlea'
- (b) Semicircular canals
- (c) Saccules
- (d) Utriculus

**(viii) The structure that stores urine temporarily is:**

- (a) Ureter
- (b) Urethra
- (c) Urinary bladder
- (d) Kidneys

**(ix) Islets of Langerhans are located in:**

- (a) Liver
- (b) Pituitary gland
- (c) Spleen
- (d) Pancreas

**(x) The main nitrogenous waste formed in the human body:**

- (a) Uric acid
- (b) Urea,
- (c) Ammonia
- (d) Creatinine

## Section B:

### Question 2:

- (i) Simple goiter is usually seen in people living in the hilly regions. Give two reasons for the statement.
- (ii) What are the two types of blood circulation in humans?
- (iii) Mention the three major steps involved in the production of urine.
- (iv) Draw a neat diagram of a Neuron and label any two parts.

### Question 3:

(i) What is Adrenal Virilism? What causes this condition?

(ii) Which is the light sensitive layer of the eyeball?

Where exactly is the image formed on this layer?

(iii) Study the diagram given below and answer the questions that follow:

(a) Identify the defect of the eye by mentioning the technical term.

(b) Mention one reason for this defect.

(c) Name the type of lens used to correct this defect.

**(iv) Give the biological terms for the three tiny bones present in the middle ear.**

**Question 4:**

**(i) Name the endocrine gland that secretes Thyroxine.**

**Give any one function of Thyroxine.**

**(ii) Give the full form of the abbreviation ACTH.**

**Which gland secretes this hormone?**

**(iii) Define the term Synapse.**

**How are Cytons and Axons of neurons placed in the Cerebrum?**

**(iv) Name the three membranous covering of the human brain.**

**Question 5:**

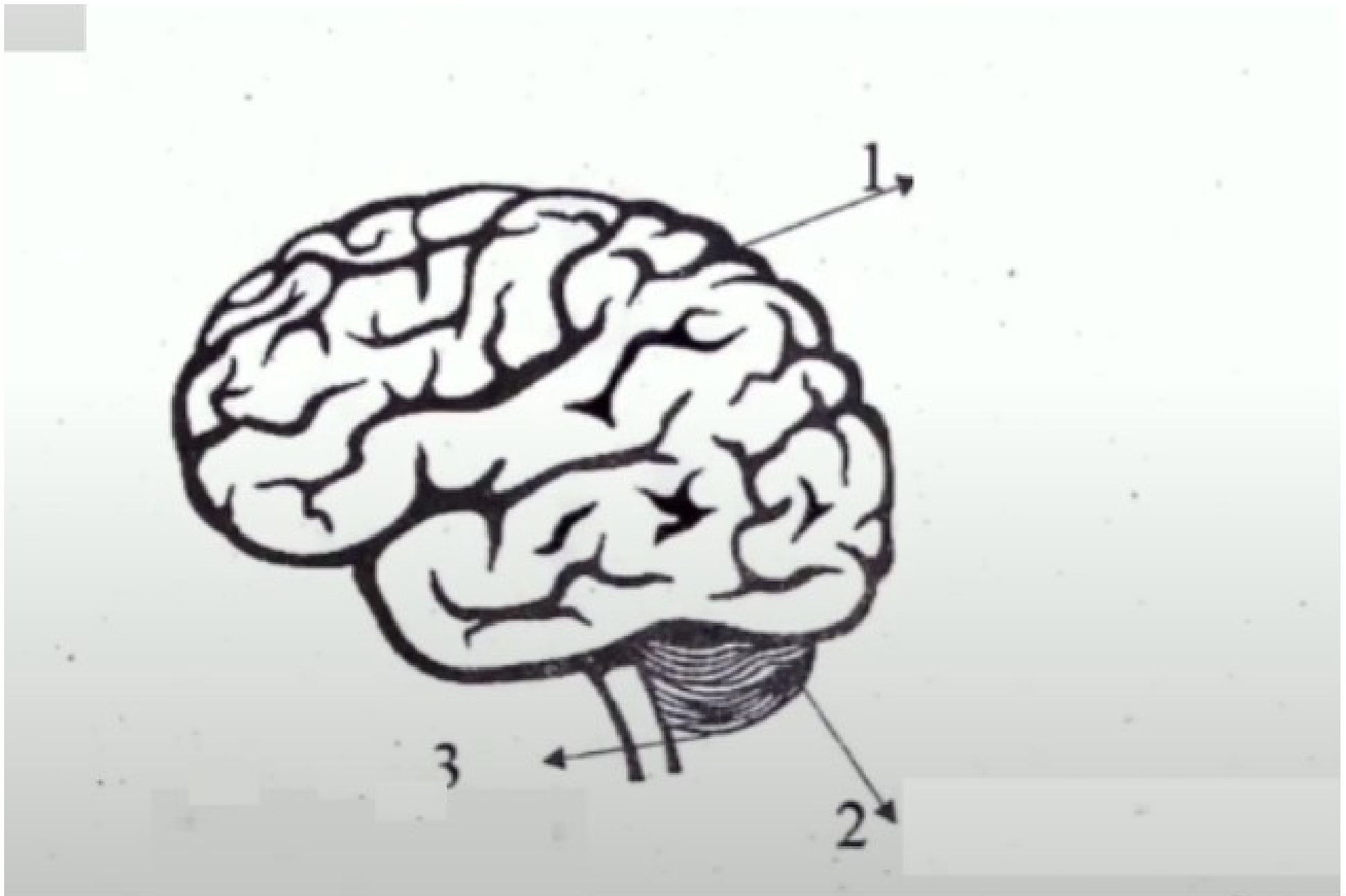
**(i) Name the nerve that transmits impulses to the brain from:**

(a) Ear

(b) Eye

(ii) A mature mammalian erythrocyte lacks nucleus and mitochondria but is efficient in its functioning. Explain by giving suitable reasons.

(iii) The diagram given below is that of a human brain. Answer the questions that follow.





- (a) Label the parts numbered 2 and 3.
- (b) State any one function of the part numbered 1.
- (iv) What is a reflex action? Name the two types of reflexes.**

**Question 6:**

- (i) Give the exact location of Pulmonary semilunar valve. When does it close?**
- (ii) Name the hormones whose deficiency causes:**
  - (a) Diabetes mellitus
  - (b) Diabetes insipidus
- (iii) Draw a neat diagram of a longitudinal section of a human kidney and label Renal Cortex and Renal Medulla on the diagram.**
- (iv) Mention one function for each of the following:**
  - (a) Lymphocytes
  - (b) Thrombocytes
  - (c) Neutrophils