

**QI] a) Name the following:**

**[5]**

- i) The fluid that leaks out of the capillaries and bathes the cells.
- ii) The animals naturally living in an area.
- iii) The natural pacemaker of the heart.
- iv) The sensation travelling through a nerve.
- v) A reflex that develops due to experience.

**b) Give an example for:**

**[3]**

- i) A mixed nerve.
- ii) Natural reflex.
- iii) A detritivore

**c) State true or false for the following:**

**[5]**

- i) The cell devoid of haemoglobin is the leucocyte.
- ii) Karl Marx identified different types of blood groups in humans.
- iii) The change in the environment that results in the change in the activity of the body of an organism is response.
- iv) The space between the doubled layered membranes of the heart is filled with a pleural fluid.
- v) Air is an agent for the dispersal of seeds and pollen.

**Q.II] a) Define:**

**[2]**

- i) A food chain
- ii) Reflex action

**b) Give one important function of:**

**[5]**

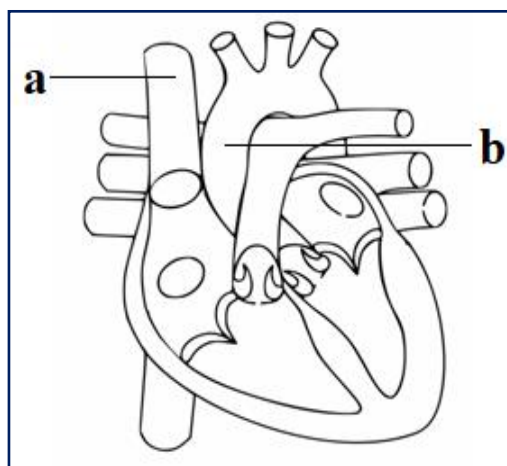
- i) Neurotransmitter
- ii) Valves in the blood vessel
- iii) Erythrocytes
- iv) Medulla Oblongata
- v) Aorta

**c) Differentiate between the following based on the information given in the bracket.**

**[5]**

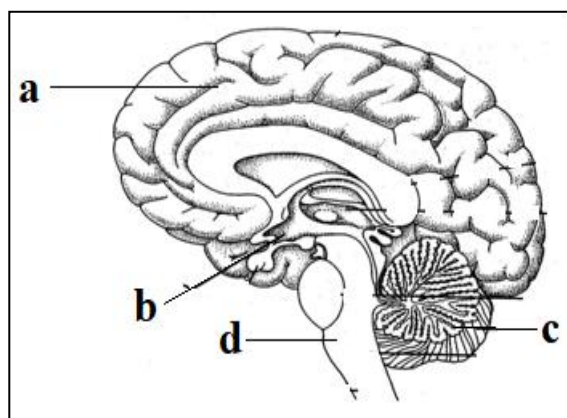
- i) Producers and Consumers (Definition)
- ii) Arteries and Veins (Structure)
- iii) Saprophyte and Symbiont (Example)
- iv) Motor neuron and Associative neuron (Function)
- v) Cranial nerves and Spinal nerves (Number in pairs)

**Q.III) Observe the diagram given below and answer the following questions: [8]**



- i) What type of blood is carried by blood vessel (a)? [1]
- ii) Where does (b) originate from? [1]
- iii) Name the part of the heart receiving oxygenated blood from the **lungs**. [1]
- iv) Name any two heart related conditions that occur commonly in humans. Explain any one. [2]
- v) During an accident a patient may be given blood from outside to save his life. What is the technical name of this process? [1]
- Briefly explain the precautions to be observed and taken in this process. [2]

**Q.IV] Observe the diagram given below and answer the following questions: [7]**



- i) Label (a) to (d). [2]
- ii) Give the function of (b). [1]
- iii) Explain the statement below with an example. [1]
- ‘The cerebrum decides the action whereas the cerebellum executes the action’.
- iv) Arrange the following in the correct logical sequence: [1]
- Receptor organ, spinal cord, motor nerve, stimulus, sensory nerve, muscle action.
- v) How are cyton and axon arranged in the brain? [1]
- vi) Name the membranous covering of the brain. [1]

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