


PAWAR PUBLIC SCHOOL, BHANDUP 						
Class	Subject	Exam	Marks	Date	Duration	No. of Printed Pages
X	Biology	II Prelims	40	9.02.2022	1 Hour 30 min	6

**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.**

The **question paper** consists of **6** printed sheets.

The figures to the right of the questions indicate full marks for that question.

### **SECTION – I (10 Marks)**

(Attempt all questions from this section)

#### Question 1

Name the following by choosing the correct answers to the questions from the given [10]  
options. (Do not copy the question. Write the correct answer only)

- (i) An anticoagulant present in the blood is:
  - (a) Hirudin
  - (b) Heparin
  - (c) Thromboplastin
  - (d) Calcium
- (ii) Deposition of uric acid in the joints of humans leads to :
  - (a) Kidney stones
  - (b) Anaemia
  - (c) Gout
  - (d) Leukemia
- (iii) The ventral root ganglion of the spinal cord contains the cell bodies of the :
  - (a) Motor neuron
  - (b) Sensory neuron
  - (c) Intermediate neuron

- (d) Association neuron
- (iv) The nutritive layer of the eye which also prevents reflection of light:
  - (a) Sclera
  - (b) Choroid
  - (c) Retina
  - (d) Endothelium
- (v) Gigantism and Acromegaly are caused due to the hypersecretion of:
  - (a) Adrenaline
  - (b) Thyroxine
  - (c) Growth hormone
  - (d) Insulin
- (vi) Instrument used to measure heartbeat:
  - (a) Sphygmomanometer
  - (b) Manometer
  - (c) Barometer
  - (d) Stethoscope
- (vii) Substances that increases the production of urine are called:
  - (a) Lymphatics
  - (b) Systemics
  - (c) Diurectics
  - (d) Prophylactics

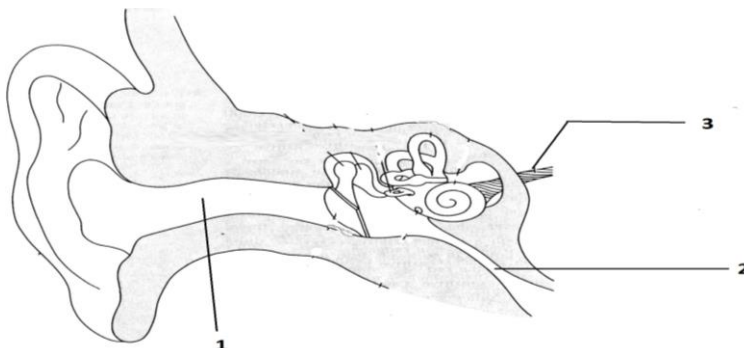
- (viii) "Organ of Corti" is located in :
- (a) Tympanum
  - (b) Cochlea
  - (c) Utriculus
  - (d) Semicircular Canal
- (ix) Part of the brain that carries impulses from one hemisphere of the cerebellum to the other:
- (a) Diencephalon
  - (b) Pons Varolii
  - (c) Thalamus
  - (d) Hypothalamus
- (x) A condition caused due to hyposecretion of thyroxine in children:
- (a) Adrenal virilism
  - (b) Exophthalmic goitre
  - (c) Gigantism
  - (d) Cretinism

## Section B

( Attempt any three questions from this Section)

### Question 2

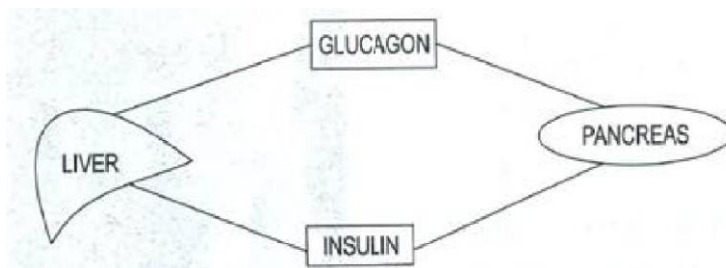
- (i) Explain the term 'Pulse'. What are the normal values of blood pressure in a human adult? [2]
- (ii) What is meant by the power of accommodation of the eye? State the nature of the image formed on the retina of a human eye. [2]
- (iii) Given below is the diagram of an ear. Label the parts numbered 1, 2 and 3. [3]



- (iv) State any three characteristics of hormone. [3]

### Question 3

- (i) State any two points of difference between colour blindness and night blindness. [2]
- (ii) Explain the term "Micturition". State the condition when dialysis is carried out in an individual. [2]
- (iii) Study the diagram given below and answer the questions that follow: [3]

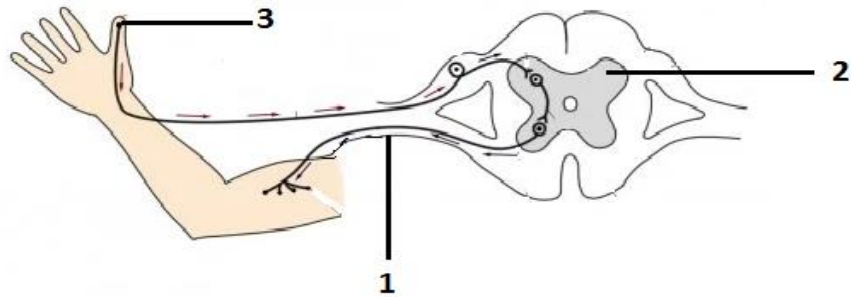


- (a) Name the cells of the pancreas that produce glucagon.
- (b) What is the technical term for the cells of the pancreas that produce endocrine hormones?
- (c) Where in the body is the pancreas located?

- (iv) State three functions of the spleen. [3]

Question 4

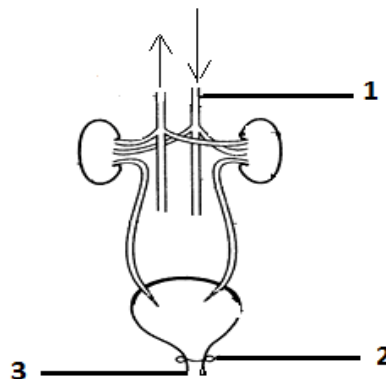
- (i) People living in hilly region usually suffer from simple goitre. [2]  
(ii) Where is the tear gland located? What is its function? [2]  
(iii) Observe the diagram and label the parts numbered 1, 2 and 3. [3]



- (iv) Answer the following questions with respect to human ear: [3]  
(a) Structure that converts sound waves into mechanical vibrations.  
(b) Structure that equalizes the air pressure on either side of the eardrum.  
(c) Structure that responds to change in body position.

Question 5

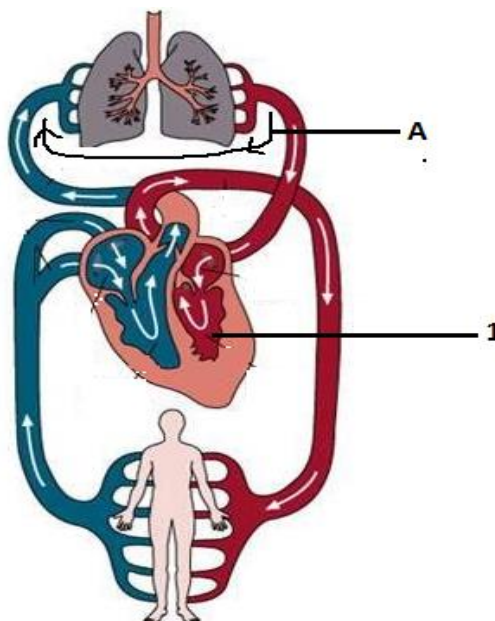
- (i) What is Presbyopia? State its cause. [2]  
(ii) Draw a neat diagram of a neuron and label any two parts. [2]  
(iii) Observe the diagram and label the parts numbered 1, 2 and 3. [3]



- (iv) Name the different types of neurons. [3]

Question 6

- (i) Name the two blood vessels that enter the liver. [2]
- (ii) Give the full form of the following abbreviations: [2]
- (a) DCT
- (b) ACTH
- (iii) Study the diagram given below and answer the questions that follow: [3]



- (a) What does the above schematic diagram represent?
- (b) Label the part numbered 1.
- (c) What type of circulation is represented by A?
- (iv) Complete the following table by filling in the blanks (a) to ( f ) stating the effects of sympathetic and parasympathetic system on the organs given: [3]

Organs	Sympathetic Nervous system	Parasympathetic Nervous system
Heart	(a)	(b)
Pupils of the eye	(c)	(d)
Salivary glands	(e)	(f)