

GREENLAWNS SCHOOL, WORLI

FINAL EXAMINATION: 2023-24

BIOLOGY

Std: VIII

Marks: 80

Date: 13/02/2024

Time: 2 hrs

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.

I A) Select the correct answers to the questions from the given options. [10]

(Do not copy the question. Write the correct answer only):

1) Which one of the following is not the correct way of managing stress?

- (a) Reading
- (b) Yoga
- (c) Cooking
- (d) Exercise

2) Semen is a mixture of sperms and secretions from:

- (a) Seminal vesicles, Prostate and Testes
- (b) Seminal vesicles, Prostate and Cowper's
- (c) Epididymis, Prostate and Testes
- (d) Epididymis, Prostate and Cowper's

3) The correct order of the whorls of the flower is:

- (a) Calyx, Androecium, Gynoecium, Corolla
- (b) Calyx, Gynoecium, Androecium, Corolla
- (c) Corolla, Calyx, Androecium, Gynoecium
- (d) Calyx, Corolla, Androecium, Gynoecium

4) The basic structural and functional unit of brain is:

- (a) Cyton
- (b) Axon
- (c) Neuron
- (d) Nephron

5) Islets of Langerhans are located in the:

- (a) Pancreas
- (b) Kidneys
- (c) Throat
- (d) Brain

6) Layering is a method of:

- (a) Sexual reproduction
- (b) Artificial vegetative propagation
- (c) Artificial pollination
- (d) Cross-pollination

7) The white matter of cerebrum mainly consists of:

- (a) Cytons
- (b) Axons
- (c) Dendrons
- (d) Dendrites

8) The thin-walled sac of skin in which testis are located is:

- (a) Seminal vesicle
- (b) Vas deferens
- (c) Scrotal sac
- (d) Epididymis

9) Playing a musical instrument is an example of:

- (a) Natural reflex
- (b) Conditioned reflex
- (c) Acquired reflex
- (d) Both b and c

10) The hormone which stimulates the thyroid gland to produce thyroxine is:

- (a) Prolactin
- (b) Thyroid stimulating hormone
- (c) Follicle stimulating hormone
- (d) Thyroxine hormone

B) State whether the following statements are true or false. If false, rewrite the correct statement by changing the underlined word / words: [5]

- 1) Auricles are bigger in size and their walls are thicker, elastic and muscular.
- 2) The use of iodised salt is recommended for thyroid deficiencies.
- 3) Budding is a common method of reproduction in Amoeba.
- 4) Lotus is pollinated by insects.
- 5) There are thirty one pairs of spinal nerves.

C) Fill in the blanks: [5]

- 1) Sneezing is an example of _____ reflex.
- 2) The uterus opens to the outside through a long, muscular tube called _____
- 3) _____ is called the master gland.
- 4) Flower having both male and female reproductive parts on the same plant are called _____ flowers.
- 5) The heart is a muscular organ made up of specialised muscles called _____ muscles.

D) Match the items in column I with the appropriate items in column II. [5]

Column I

- 1) Blood
- 2) Lymph
- 3) Prolactin
- 4) Adrenaline
- 5) Uterus

Column II

- (a) Thyroid gland
- (b) Pear shaped
- (c) Closed circulatory system
- (d) Pituitary gland
- (e) Open circulatory system
- (f) Adrenal gland

E) Give one difference between the following pairs on the basis of what is indicated in the bracket (Answer only in tabular form). [5]

- 1) Fragmentation and spore formation (a plant reproducing by this method)
- 2) Male and female (hormone secreted)
- 3) Sensory and motor neurons (function)
- 4) Arteries and veins (direction of blood flow)

5) Pituitary and thyroid gland (location in the body)

F) Explain the following terms:

[5]

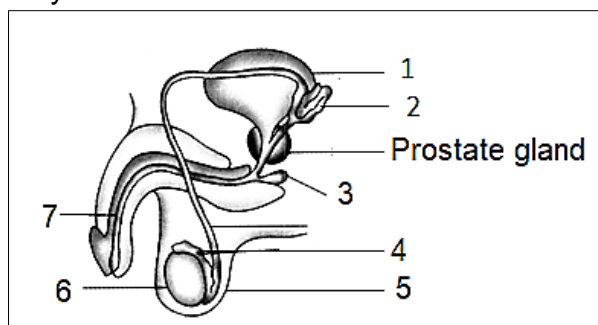
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|-----------------|------------------|
| 1) Adolescence | 4) Synapse |
| 2) Implantation | 5) Reflex action |
| 3) Pollination | |

G) State functions of each of the following:

[5]

- | | |
|----------------------|---------------|
| 1) Calyx | 4) Glucagon |
| 2) Coronary artery | 5) Epididymis |
| 3) Medulla oblongata | |

II A) Given below is the schematic diagram of the sectional view of the human male reproductive system:



- | | |
|---|-----|
| 1) Label the parts 1, 4, 6 and 7. | [2] |
| 2) Give function of parts 2, 3 and 5. | [3] |
| 3) Draw a neat and labelled diagram of the male gamete. | [2] |

B) What is a reflex arc?

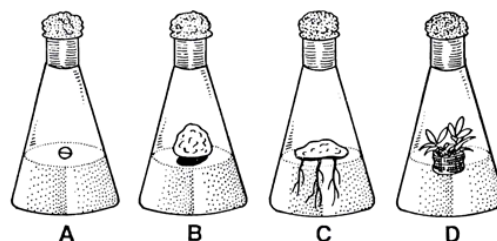
[1]

Complete this pathway of reflex arc:

[2]

Stimulus → _____ → _____ → Spinal cord → _____ → _____

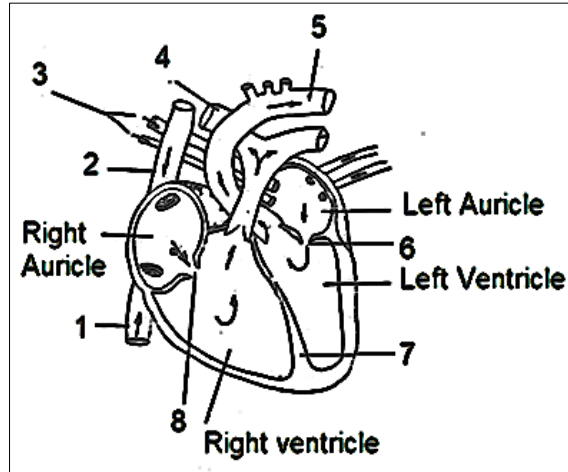
III A) The figure below represents one of the methods of propagation of plants.



- | | |
|---|-----|
| 1) What is an explant? | [1] |
| 2) Why are the explants treated with sterilization chemicals? | [½] |
| 3) What is callus? What is added to callus? | [1] |
| 4) Name one plant grown by this technique. | [½] |
| 5) Mention one benefit of this technique. | [1] |

- B) How does a single cell fertilized egg grows into an adult human body? [3]
 C) List any two important physical changes in boys and girls that take place during puberty. [2]
 D) What are hormones? [1]

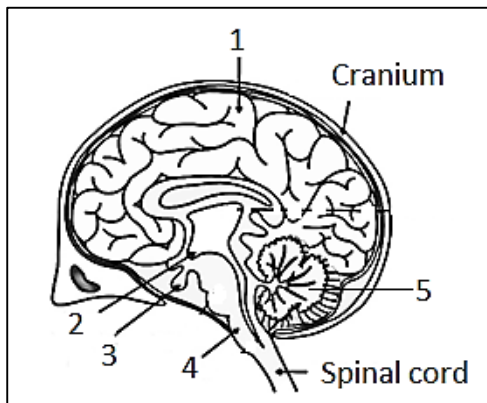
IV A) The figure below represents internal structure of the human heart.



- 1) Label parts 1, 2, 5 and 7. [2]
- 2) Name the valves 6 and 8. [1]
- 3) Distinguish between 3 and 4. [1]
- 4) How is the heart protected? [1]

- B) State two disadvantages of Vegetative reproduction. [2]
 C) Describe a neat and labelled diagram of a nerve cell. [3]

V A) The figure below shows brain in median section:



- 1) Name parts 2 and 4. [1]
- 2) Give functions of any two hormones of part 3. [2]
- 3) State the functions of part 1 and 5. [2]
- 4) How is the arrangement of neurons in the Spinal cord. [1]

- B) Give scientific reasons for the following: [4]
- 1) Blood circulation in humans is called double circulation.
 - 2) Sympathetic and parasympathetic systems are antagonistic in their actions.
