

FIRST TERMINAL EVALUATION 2017-18
BIOLOGY

Standard: X

Time: 1½ hrs.
Score: 40**Instructions**

1. First 15 minute is given as cool off time. This time is to be used for reading and understanding the questions.
2. Answer the questions based on instructions.
3. Answer the questions according to the score and time.

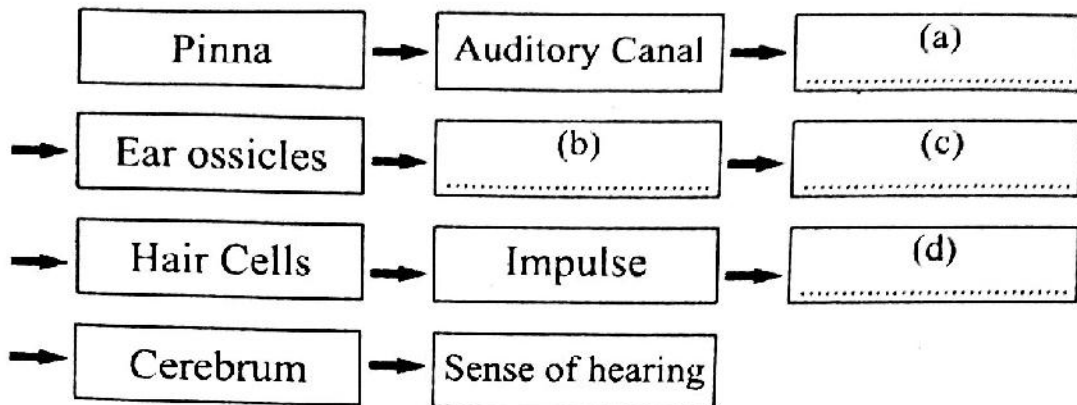
Answer any five from questions 1 to 6. Each question carries 1 score (5 x 1 = 5)

1. Following are the four different types of hormones. Which hormone is produced from the ovary?
a) Calcitonin b) Testosterone c) Progesterone d) Aldosterone (1)
2. The pairs given below represent the parts and functions of eye. Identify the correct pairs.
a) Lens : Maximum visual Clarity.
b) Cornea : Refracts light rays to focus on the retina.
c) Optic nerve : Transmits impulses to the visual centers in the brain.
d) Vitreous humor : Nourishes the tissues of the eye. (1)
i) a,c (ii) b,c (iii) a,d (iv) b,d.
3. Identify the correct statement from those given below.
(a) Sensory nerve carries impulses to and from the brain and spinal cord.
(b) Motor Nerve carries impulses from the brain and spinal cord to various parts of the body.
(c) Mixed Nerve carries impulses from various parts of the body to the brain and the spinal cord. (1)
4. Make necessary corrections if any, in the underlined portions of the statements given below.
a) Thyroxine promotes growth of the body during its growth phase. (1)
b) Thyroxine raises the rate of metabolism.
5. Find the odd one and write the common feature of others.
Eye spot, Iris, Lateral line, Ommatidia. (1)
6. Identify the word pair relationship and fill in the blanks.
a) Central Nervous system : Consists of brain and the spinal cord.
..... : Consists of cranial nerves and spinal nerves. (1)

Answer any six from questions 7 to 13. Each question carries 2 score (6 x 2 = 12)

7. Cerebro spinal fluid is filled within the inner membrane of meninges and the ventricles of the brain.
a) How is cerebro spinal fluid formed? (½)
b) Write the functions of cerebro spinal fluid (1½)

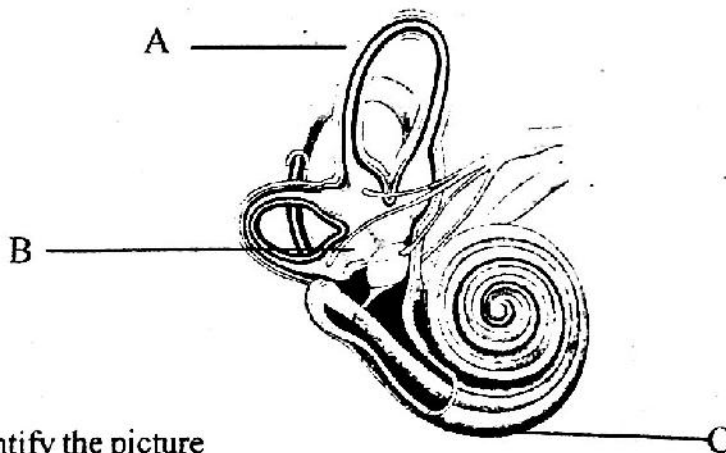
8. Prepare a poster to be used for the programme organised by the Science club to promote the importance of eye donation. (2)
9. The flow chart related to hearing is given below. Complete the flow chart? (2)



10. Synapse is seen between two neurons only. Do you agree with this statement. Why? (2)
11. Increases of glucose in blood is said to be diabetes. Should't one be more energetic if the glucose level in his/her blood rises? This is the doubt of Balu. What is your opinion about the above statement? Explain (2)
12. "The Thymus gland is situated just below the sternum"
- Name the hormone that is produced by the thyroid gland. (1/2)
 - "This gland is active during infancy" What is the significance of it? (1/2)
13. Irregularity in the production of a certain hormone causes the following problems.
- * Weight loss
 - * High metabolic rate
- Identify the disease? (1/2)
 - What are the other symptoms of the disease? (1/2)

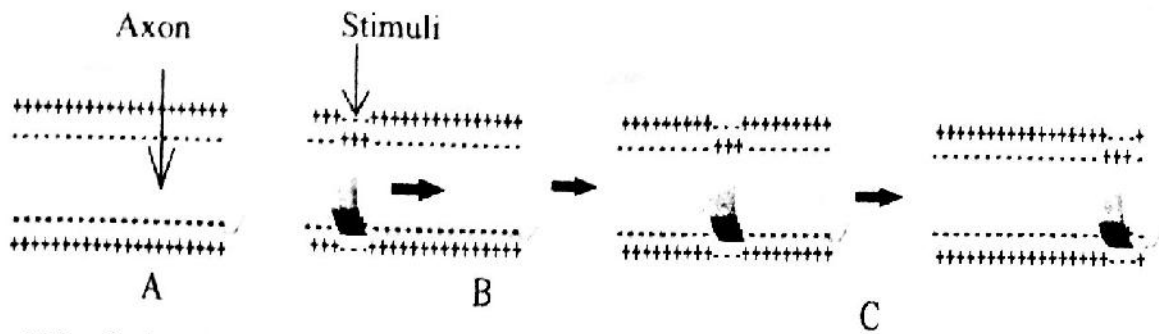
Answer any 5 from questions 14 to 19. Each question carries 3 score. (5 x 3 = 15)

14. Observe the picture and answer the questions given below.



- Identify the picture (1/2)
- Identify the parts indicated as A, B and C? (1/2)
- Write down the functions of the parts A, B and C. (1)

15. Analyse the illustration of impulse transmission through axon and answer the following questions.



- What is the charge on either side of the plasma membrane in the resting state? (1)
- How the distribution of ions change on either side of the plasma membrane when it gets stimulated? Explain. (2)

16. The series of changes taking place in the working of our body in emergency situation is given below.

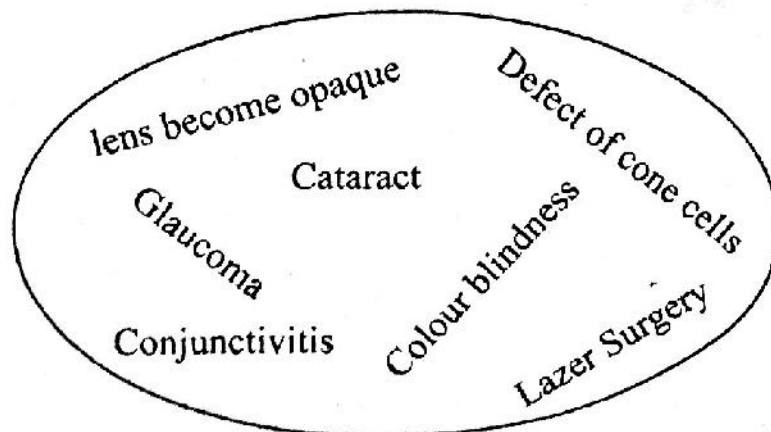
- Classify the following activities with suitable heading.
 - * Heart beat increases
 - * Trachea constricts.
 - * Pupil constricts.
 - * Glycogen is converted to glucose. (2)
- Name two hormones which help in these activities. (1)

17. Symptoms of a disease that affect the Nervous system are given below.

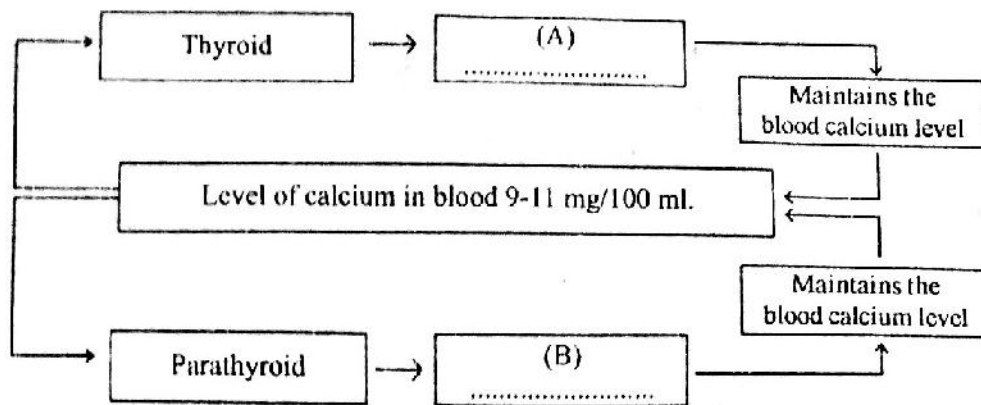
Loss of memory, inability to recognize friends and relatives.

- Identify the disease (1)
- Write the cause of the disease (1)
- What should be your approach towards persons affected with this disease? (1)

18. Make suitable pairs related to eye defects from the words given in the box. (3)



19. Maintenance of the level of calcium in blood is illustrated below. Analyse it and answer the questions.



- a) Name the hormones marked as A and B. (1)
- b) What is the action of hormones A and B in regulating the blood calcium level to normal. (2)

Answer any 2 from questions 20 to 22. Each question carries 4 score. (2 x 4= 8)

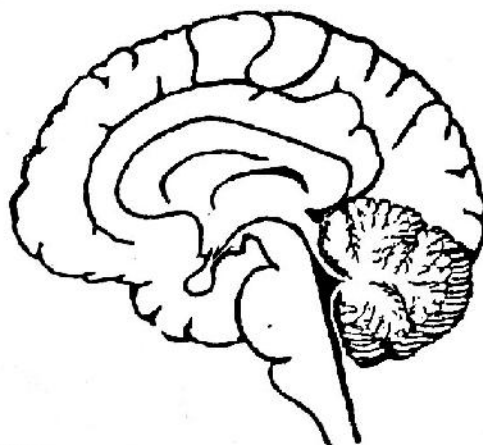
20. Babu is suffering from increased thirst and frequent urination. It is revealed that the deficiency of a hormone secreted by the brain is the cause of this condition.

- a) Identify his disease. (1)
- b) Name the hormone responsible for this condition (1)
- c) Explain how this hormone helps in maintaining the level of urine? (2)

21. Raju cannot see objects clearly in dimlight.

- a) Is it possible to solve this problem using lenses ? Why ? (1)
- b) How can this problem be solved ? (1)
- c) If this situation continues, how adversely does it affect his eye sight ? (2)

22 Redraw the diagram. Write down the functions of the parts given below and label them in the diagram.



- a) Medulla oblongata
- b) Thalamus
- c) Cerebellum.

(4)
