SAMAGRA SHIKSHA, KERALA

E1006-Bio

First Terminal Evaluation 2018-19

BIOLOGY

Std. : X

Time : 1½ Hours
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 questions from 1 to 6. 1 score each. (5x1=5)

1. The doctor prescribed an injection for an allergy patient. Choose the component present in it.
   (a) Insulin
   (b) Oxytocin
   (c) Cortisol
   (d) Adrenaline

2. From the given statements, select the correct one that is related to glaucoma.
   (a) Affect conjunctiva
   (b) Can be rectified through LASER surgery
   (c) Eye lens becomes opaque
   (d) Lack of Vitamin - A

3. Identify the receptor and name the visual pigment present in it.

4. Select the correct pair.
   (a) Sympathetic system - Production of Saliva increases
   (b) Sympathetic system - Pupil constricts
   (c) Para sympathetic system - Trachea constricts
   (d) Para sympathetic system - Production of hormone increases

5. **Analyse the statement and reason and select the right option from those given below.**

Statement : Cerebrospinal fluid nourishes the brain tissue.

Reason : Cerebrospinal fluid is formed from the blood.

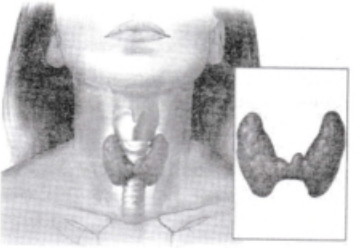
(a) Statement is correct, reason is incorrect
(b) Statement and reason are incorrect
(c) Statement is incorrect and reason is correct
(d) Statement and reason are correct

6. Correct mistakes if any, in the part underlined.

(a) The normal level of blood calcium is 9-11 mg / 100 ml.
(b) Pineal gland helps in the maturation of lymphocytes.

Answer any six questions from 7 to 13. 2 score each. **(6x2=12)**

7. Analyse the figure and answer the questions.



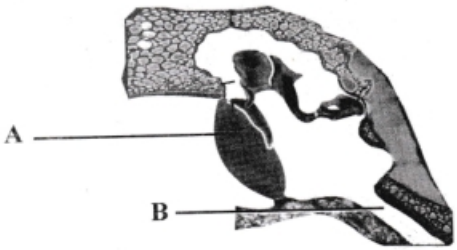
(a) Identify and name the gland in the picture.

(b) Iodine is essential for the production of a hormone from this gland. Which is that hormone ?

8. Rearrange the Column B according to Column A.

A	B
i. Planaria	a. Ommatidia
ii. Shark	b. Jacobson's organ
iii. Insect	c. Lateral line
iv. Snake	d. Eyespot

9. Observe the figure and answer the following question.



(a) Identify and name the part labelled as 'A'.

(b) What is the function of part 'B' ?

10. From the given box, select the parts that are related to the following functions.

Cerebellum, Thalamus, Hypothalamus, Cerebrum, Medulla Oblongata, Cerebrospinal fluid, Myelin sheath

(a) Relay of impulses.

(b) Maintains the level of water in blood.

(c) Maintains the equilibrium of the body.

(d) Acts as an electric insulator.

11. Analyse the data given in the box and answer the questions.

X - The production of this hormone is high during night and low during day. Y - The hormones from adrenal gland act along with sympathetic system.

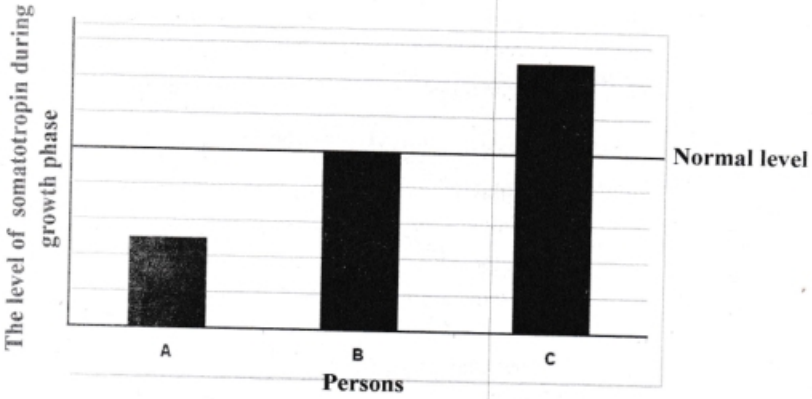
(a) Identify the hormone and gland mentioned in 'X'.

(b) Name the hormones mentioned in 'Y'.

12. Complete the table

Disease	Cause	Symptons
(a) _____	Accumulation of an insoluble protein in nervous tissue	Loss of memory
Parkinsons	Destruction of ganglia in brain and (b) _____	(c) _____
Epilepsy	(d) _____	Patient falls unconscious

13. Analyse the given graph and answer the following questions.

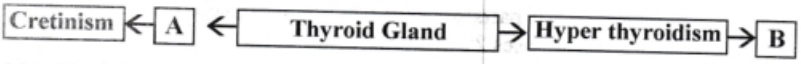


(a) Name the abnormal condition of growth that 'C' may be affected.

(b) What disorder may happen to 'A'?

Answer any five questions from 14 to 20. 3 scores each. **(5x3=15)**

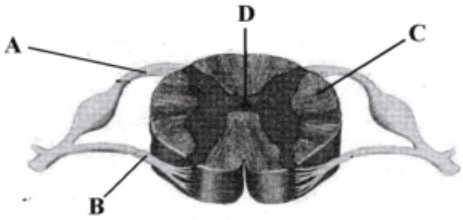
14. Analyse the illustration and answer the questions.



(a) Identify and write A and B.

(b) Mention the symptom of 'B'?

15. Observe the figure and answer the questions.



(i) Which among the following options correctly matches with the indications in the figure.

(a) A. Ventral root B. Dorsal root
C. Grey matter D. Central canal

(b) A. Dorsal root B. Ventral root
C. White matter D. Central canal

(c) A. White matter B. Grey matter
C. Dorsal root D. Ventral root

(ii) What is the difference between the impulses transmitted through A and B ?

16. Analyse the given reflex actions and answer the questions.

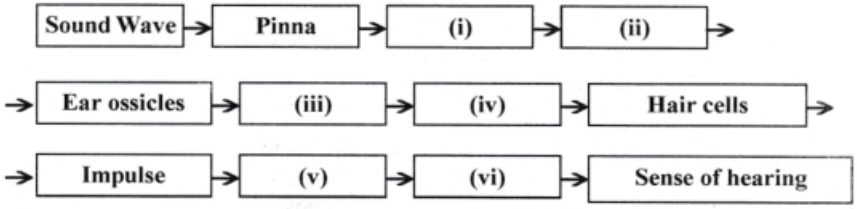
(A) The leg withdraws unknowingly when a thorn pierces.

(B) The eyes blink when a fly approaches them.

(a) Identify and write the names of controlling centres of A and B.

(b) Write the correct sequence of the path of impulses in 'A'.

17. (a) Complete the flow chart related to hearing.

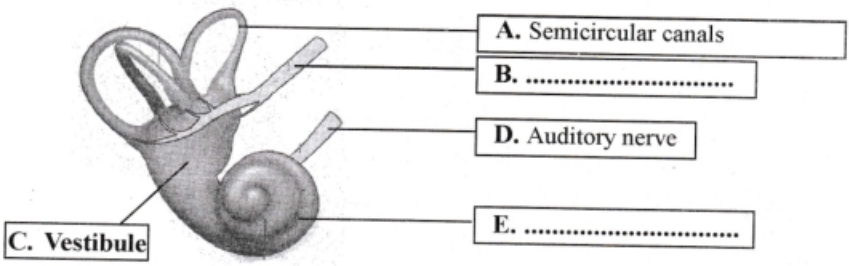


18. (a) Which are the parts of eye that become opaque in each case, due to the following diseases ?

(i) Xerophthalmia (ii) Cataract

(b) Mentiona the condition that leads to Xerophthalmia ?

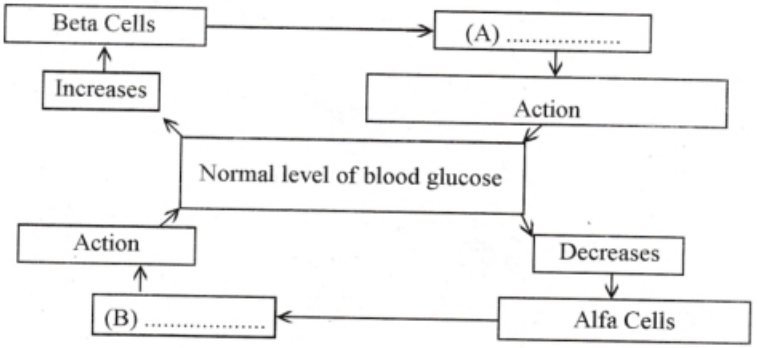
19. Observe the figure and answer the following questions.



(a) Identify B and E and write their names.

(b) Based on the two functions of ear, classify the parts from A to E by giving suitable titles.

20. Observe the illustration related to the maintenance of blood glucose level and answer the questions given below.



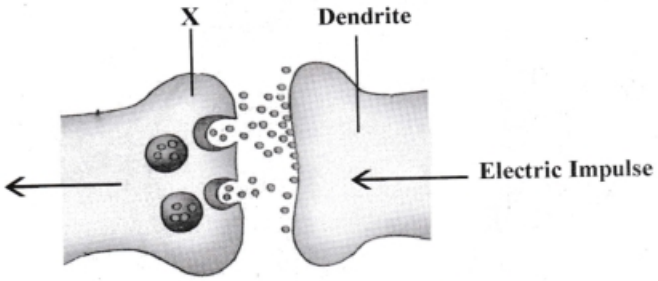
(a) What is the normal level of blood glucose ?

(b) Which are the hormones indicated as A and B ?

(c) Write any one action of A and B in the maintenance of blood glucose level.

Answer any two questions from 21 to 23. 4 scores each. **(2x4=8)**

21. Observe the illustration and answer the questions.

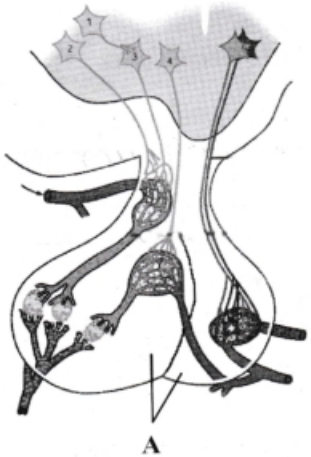


(a) Is there any mistake in the illustration. Explain.

(b) Which is the part indicated as 'X' ?

(c) Name any one chemical substance released from 'X'. Write the function of the chemical substance.

22. Analyse the picture and answer the following questions.

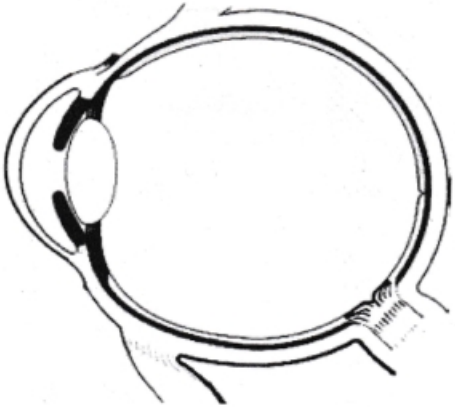


(a) Identify and write the name of gland 'A'.

(b) How does 'A' influence the activities of thyroid and adrenal glands ?

(c) Which are the hormones produced from hypothalamus and stored in 'A' ?

23. (a) Copy the structure of eye and label the following parts.



(A) Aqueous humor

(B) Sclera

(C) Optic nerve

(b) Write the functions of 3 labelled parts.