A

Std-X

SAMAGRA SHIKSHA- KERALA

FIRST TERMINAL EVALUATION 2019-20

BIOLOGY

E 1006- Bio

Time : 1 ½ Hours

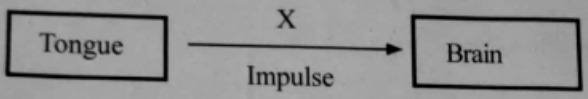
Score: 40

General Instructions

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

Answer any five from questions 1-6. One Score each. (5x1=5)

1. Analyse the illustration, identify and write the type of nerve indicated as 'X'



2. Analyse the given situations, identify the part of the central nervous system that controls the situations in each.

   a. Eyes are blinked when flies approach them.

   b. Hands are withdrawn when touched on hot object.

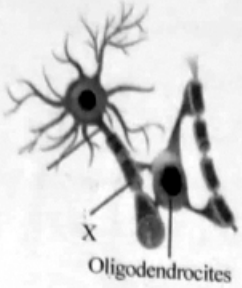
3. Identify and write the name of the photoreceptor given below. Name the pigment present in it.

4. Identify the word relation and fill up the blanks.

   (i) Ethylene : Ripening of fruit

   (ii) Ethyphone : .....

5. Analyse the illustration and write the parts of nervous system in which 'X' is present



6. Choose the correct statements

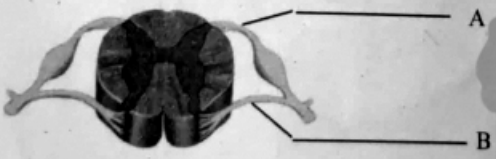
- Radial muscles contract in dim light.
- Circular muscles contract in dim light.
- Pupil constricts in dim light.
- Pupil dilates in dim light.

Answer any 6 from questions 7-13. 2 scores each. (6x2=12)

7. Arrange sequentially the processes that are related to sense of smell.

- Olfactory particles dissolve in the mucus present in the nasal cavity.
- Impulses reach the cerebrum and feel sense of smell.
- Olfactory receptors are stimulated and impulses are formed.
- Olfactory particles from the air enters the nasal cavity.

8. Analyse illustration and answer the questions.



i. Identify the parts indicated as A, B

ii. How do A and B differ in function ?

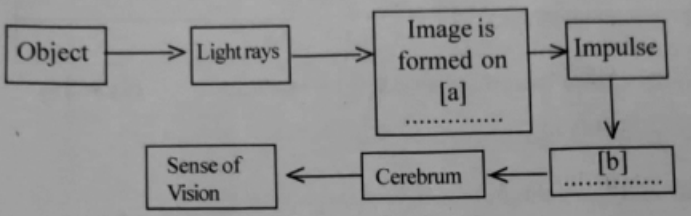
9. Analyse the indicator and answer the questions.

'The covering of the anterior part of the sclera except cornea.'

i. Name the 'covering' mentioned above ?

ii. How does the prolonged deficiency of vitamin 'A' affects the 'covering' ?

10. Analyse the illustration and answer the questions.



i. Fill up 'a' and 'b' appropriately

ii. How are impulses generated when image is formed ?

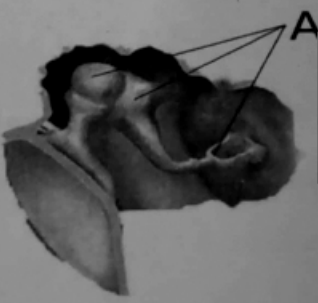
11. Analyse the given sentence from a science article and answer the questions.

'The hormones of the endocrine glands present on kidneys prepare our body to meet emergencies'.

i. Which is the gland indicated above ?

ii. How does this gland prepare our body to meet emergencies ?

12. Observe the figure related to structure of ears and answer the questions.



i. Identify and name the part indicated as A

ii. How does this part influence the sense of hearing ?

13. Arrange the column B to suit with column A.

A. Organism	B. Parts where receptors are seen
i. Shark	a. taste buds
ii. Snake	b. eye spot
iii. Fly	c. Jacobson's organ
iv. Planaria	d. lateral lines
	e. Ommatidia

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

14. Give reasons for the given statements.

i. The inner part of the cerebrum is seen in white colour.

ii. All spinal nerves are mixed nerves.

iii. Damage to medulla oblongata may cause sudden death

15. Analyse the figures related to the power of accommodation of the eye and answer the questions.

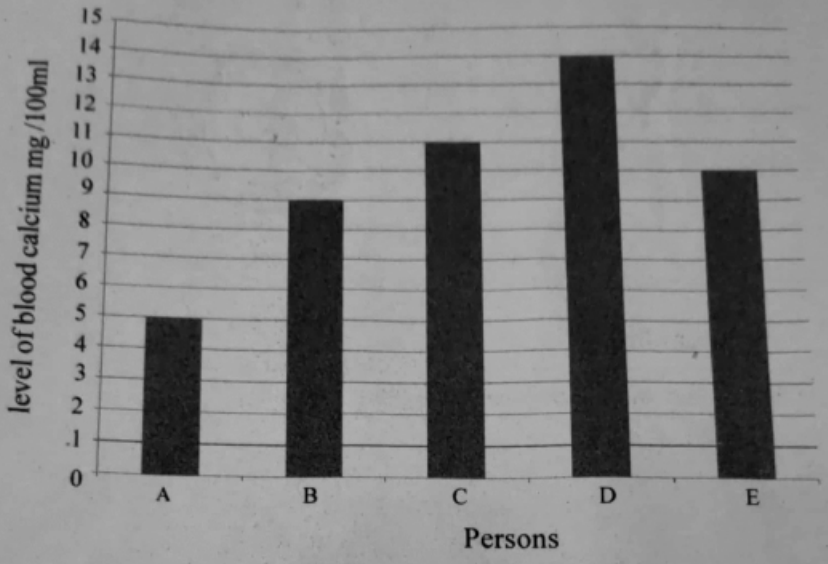
A

B

i. Which is the figure that indicates the change in lens while viewing near objects?

ii. What change occur in the curvature of lens while viewing distant objects ? How do ciliary muscles and ligaments help for this ?

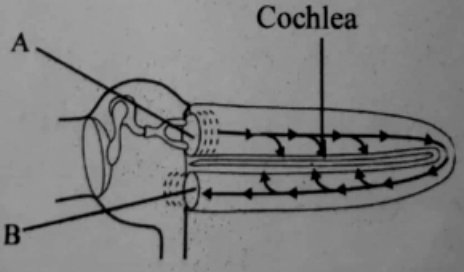
16. Analyse the graph showing the level of blood calcium in different persons and answer the questions.



i. Who are the persons having normal blood calcium level ?

ii. What is the reason for difference in calcium level in A and in D?

17. Analyse the illustration and answer the questions.



(i) Identify the parts A and B ?

(ii) How do the fluid movements in cochlea help in the formation of impulses ?

18. Analyse the given statements related to eye diseases. Arrange them in table by giving suitable titles.

- Reabsorption of aqueous humor does not occur
- Defects in cone cells
- Laser treatment is the remedy
- Eye lens become opaque.

_____	colour blindness	_____
•	•	•
•		

19. Identify the figures and answer the questions

A B

i. To which gland the diseases A and B are related ?

ii. How does the disease A differ from B ?

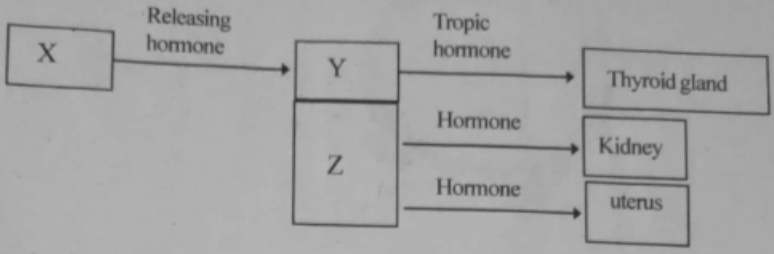
iii. Suggest a food habit that prevent the diseased condition in B.

20. Fill up the blanks in the table.

Disease	Cause	Symptoms
a	Production of dopamine, a neurotransmitter in the brain gets reduced.	b
c	d	continuous muscular contraction, frothy discharge from mouth
Alzheimer's	e	f

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

21. Analyse the illustration and answer the questions.



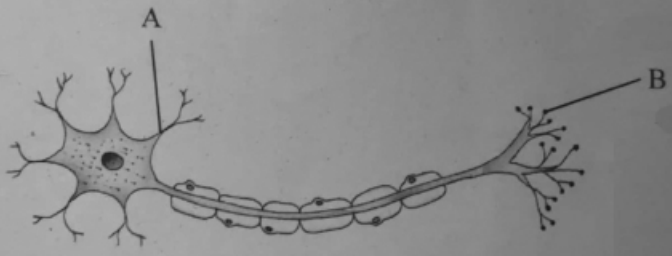
i. Identify and name the glands indicated as 'X' and 'Y'

ii. Which are the hormones synthesised by 'X' and stored in 'Z' ?

iii. Name any two growth disorders related to difference in hormone level that is formed from Y.

iv. How does releasing hormone controls the production of thyroxine ?

22. Observe the figure and answer the questions.

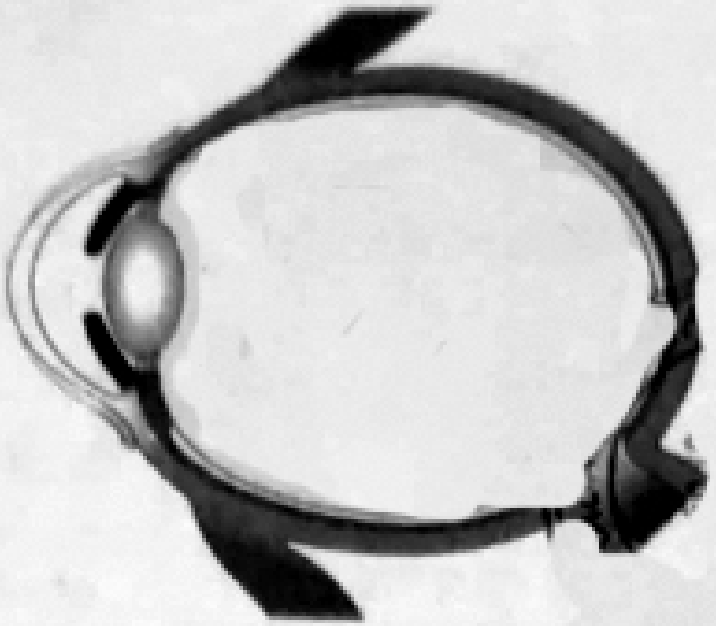


i. Which are the parts indicated as A and B ?

ii. What is the role of B in the transmission of impulses ?

iii. Construct a flow chart showing the transmission of impulses through a neuron

23. Redraw the diagram, then identify and label the following parts.



(i) The layer in which Photoreceptors are present.

(ii) The chamber filled with water like fluid.

(iii) The fluid that maintains the shape of the eye.