

A**SAMAGRA SHIKSHA, KERALA
FIRST TERMINAL EVALUATION 2022-23****E-1006-Bio****BIOLOGY****STD- X****Time : 1½ hrs.
Total Score : 40****Instructions:**

- 15 minutes is given as coll off time. This time is to be used for reading the question paper.
- Attempt the questions according to the instructions.
- Keep in mind the score and time while answering the questions.

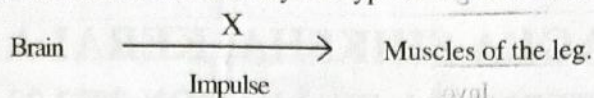
(Answer any 5 from questions 1-6. One score each (5x1=5)).

1. The part which regulate the speed and direction of nerve impulses is: (1)
a) Central canal b) Synapse c) Inter neuron d) Meninges
2. Identify the figure which indicates the change in lens while viewing the nearby object. (1)

**A)****B)**

3. Correct mistakes if any in the underlined portion. (1)
a) The hormone Thymosin helps to maintain the rhythm of our daily activities.
b) Thymosin is called as youth hormone.
c) Pineal gland secretes the hormone thymosin.
4. Identify the word pair relation and fill in the blank. (1)
a) Sensory impulses : Dorsal root
b) Motor impulses :
5. Choose the normal level of calcium in blood from those given below. (1)
a) 9-11 mg/ 100ml b) 7-8 mg/ 100ml c) 70-110 mg/100ml d) 70-126mg/100ml

6. Observe the illustration and identify the type of nerve indicated as 'X'.



(Answer any 6 from questions 7-13. 2 score each)

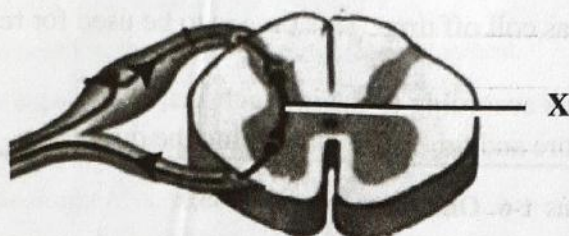
(6x2=12)

7. Give reason by analysing the following statement.

"All hormones do not function in all cells."

(2)

8. Observe the illustration and answer the questions.



a) Identify the part indicated as 'X' ?

(1)

b) Write the functions of this part?

(1)

9. The results of the two urine samples tested by using Benedict Reagent is given below. Analyse it and form inferences.

(2)

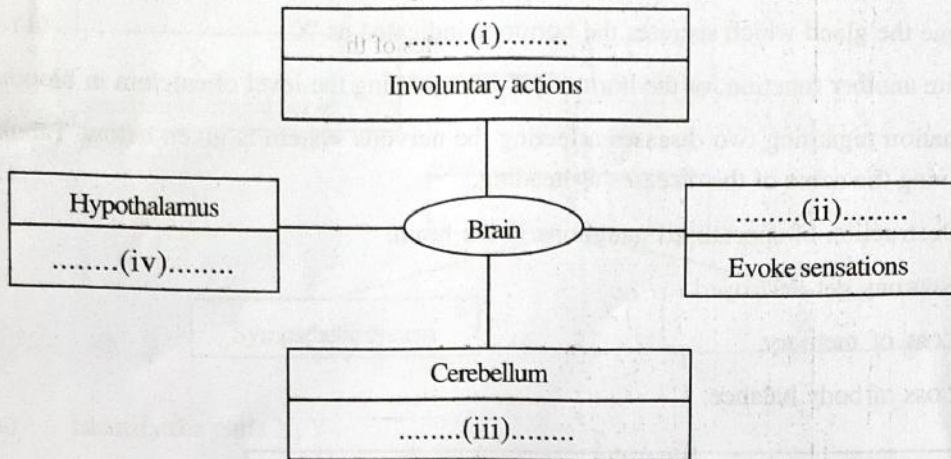
Sample - A	Sample - B
Orange colour	Blue colour

10. Complete the table related to the defects or diseases of eye.

(2)

Defects/ Diseases	Causes	Symptoms
Night blindness(i).....	Cannot see clearly in dim light.
.....(ii).....	Prolonged deficiency of vitamin A(iii).....
.....(iv).....	Defect of cone cells.	Cannot distinguish red and green colours.

11. Complete the illustration including the parts of brain and their function. (2)

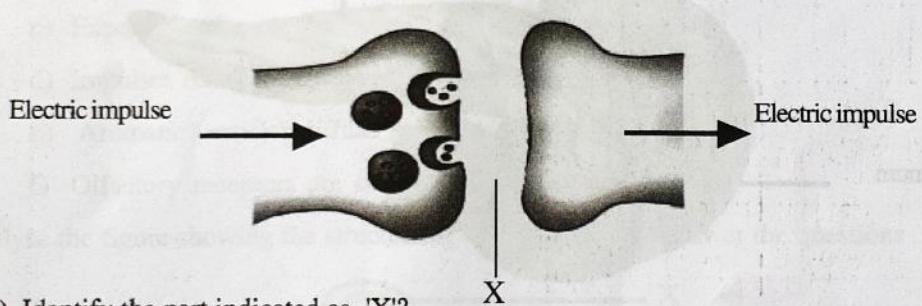


12. Analyse the statement and answer the questions.

"Formation of a fluid in the eye is similar to the formation of cerebrospinal fluid"

- a) Identify the fluid in the eye. (1)
- b) Write its function. (1)

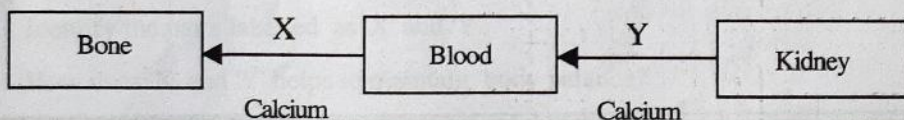
13. Observe the illustration indicating the transmission of impulses and answer the questions.



- a) Identify the part indicated as 'X'? (1)
- b) Write the common name of the chemical substances secreted to this part. Write their function.? (1)

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

14. Analyse the illustration showing two activities that regulate the level of calcium in blood and answer the questions.



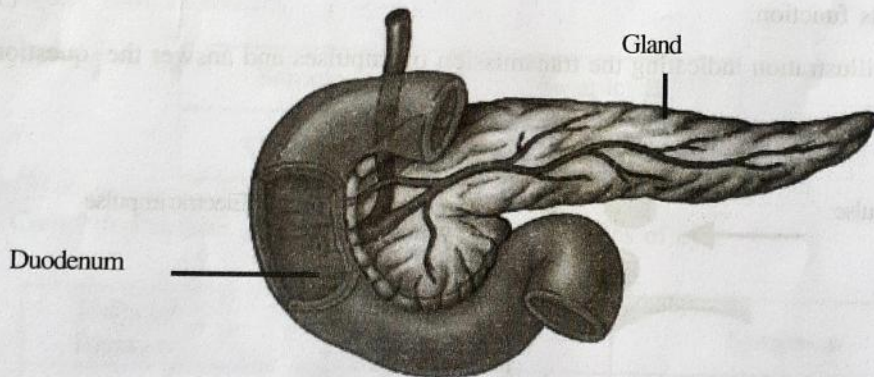
- a) Name the hormone indicated as 'Y'. (1)
- b) Name the gland which secretes the hormone indicated as 'X'. (1)
- c) Write another function of the hormone Y in regulating the level of calcium in blood. (1)

15. Information regarding two diseases affecting the nervous system is given below. Tabulate them giving the name of the diseases as heading. (3)

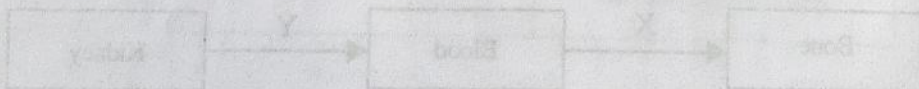
- Destruction of specialised ganglions in the brain.
- Neurons get destroyed.
- Loss of memory.
- Loss of body balance.

(A)	(B)
.....
●	●
●	●

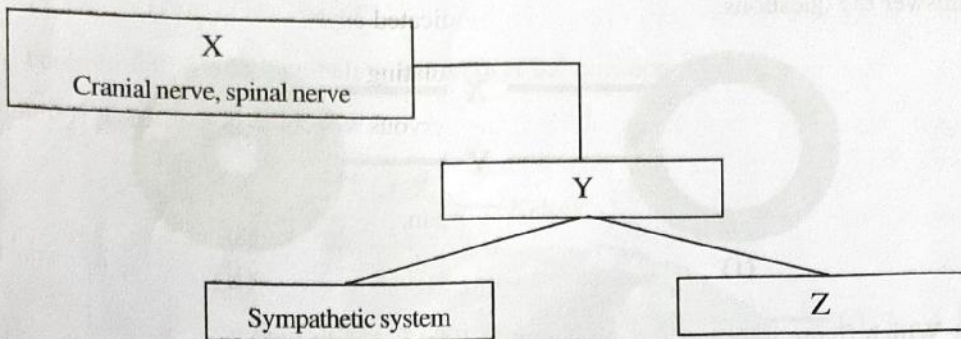
16. Observe the figure and answer the questions.



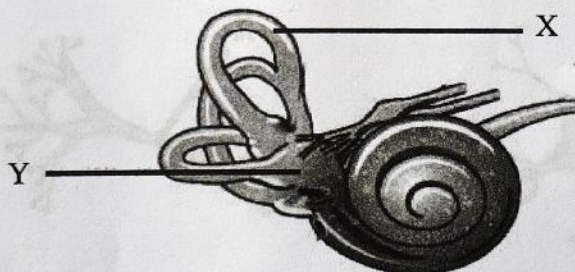
- a) Identify the gland indicated in the figure. (1)
- b) Name the digestive juice secreted by this gland. (1)
- c) How does this gland regulate blood glucose levels without falling below normal level? (1)



17. Analyse the illustration related to nervous system and answer the questions.

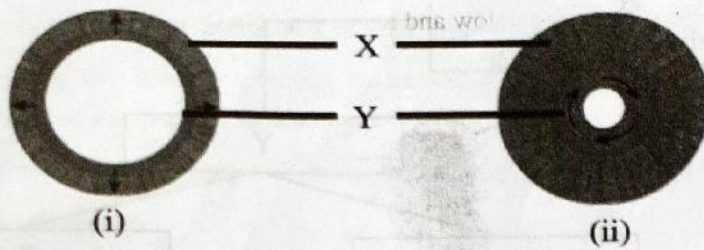


- a) Identify the parts X, Y. (1)
- b) Write one action of 'Z' in each of the body parts given below. (2)
- i) Liver
 - ii) Trachea
18. Different stages in the process of detecting smell is given below. Arrange them in the sequential order. (3)
- a) Aromatic particles dissolve in the mucus inside the nostrils.
 - b) Impulses are formed.
 - c) Experience the sense of smell.
 - d) Impulses reach the cerebrum through olfactory nerve.
 - e) Aromatic particles diffuse in the air enter the nostrils.
 - f) Olfactory receptors are stimulated.
19. Analyse the figure showing the structure of internal ear and answer the questions .



- a) Identify the parts labelled as 'X' and 'Y'. (1)
- b) How does 'X' and 'Y' helps to maintain body balance? (2)

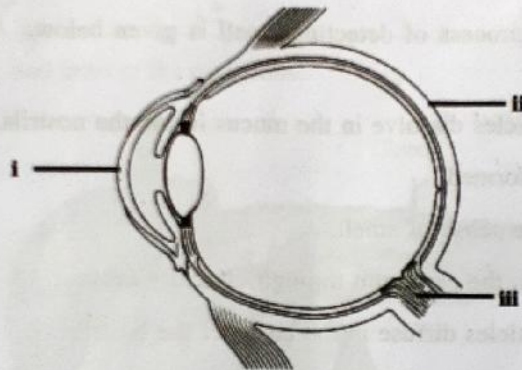
20. Observe the picture illustrating the muscle activity of the iris in regulating the light in the eye and answer the questions.



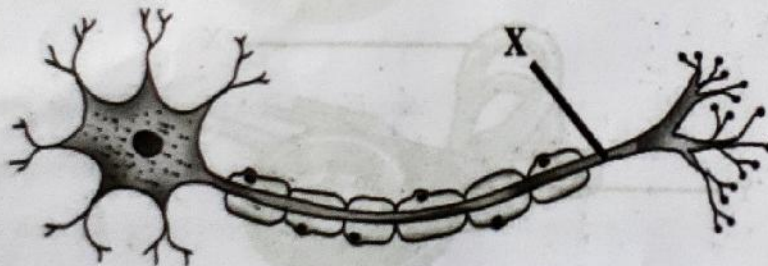
- a) Which figure indicates the regulation of light in bright light? (1)
- b) Name the muscles indicated as 'X' and 'Y'. (1)
- c) How does the size of the pupil regulated in dim light? (1)

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

21. Redraw the diagram. Identify and write the name and functions of the labelled parts. (4)



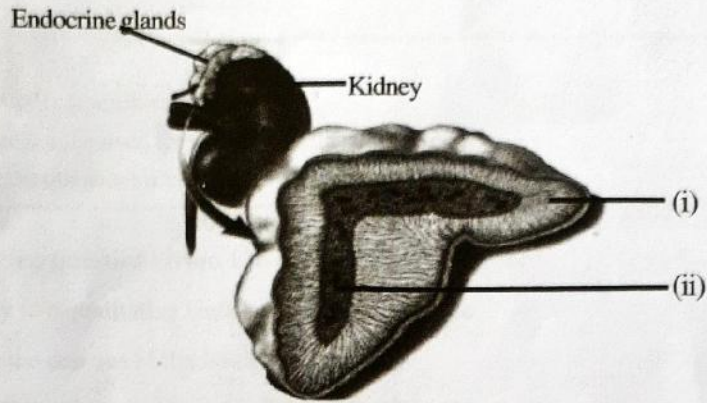
22. Redraw the diagram and answer the questions given below. (4)



- To copy the diagram (1)
- a) Name the organ system in which the cell shown in the diagram belongs to. (1)
- b) Identify the part labelled as 'X' and write its function. (1)

c) What changes are made in the charges of ions on either side of the plasma membrane of this cell, when stimulated? (1)

23. Observe the figure given below and answer the questions.



- a) Identify the endocrine gland. (1)
- b) Write the name of the parts labelled as (i), (ii) . (1)
- c) Name the hormones secreted by this gland during emergency situations (1)
- d) Name any one hormone secreted by the part indicated as (i) and write its function. (1)