



SSLC PRE MODEL EXAMINATION 2023
Set A

Time: 1 1/2 Hours

BIOLOGY

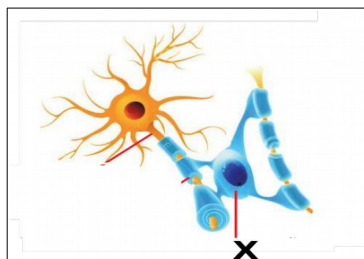
Maximum Score: 40

Instructions

- a. The first 15 minutes is cool off time. Use this time to read and understand the questions clearly.
- b. Answer as per the instructions and questions only.
- c. Write answers on the basis of score and time.
- d. From questions 1 to 23 maximum scores are 40.

(From question number 1 to 6 each one carries one score [1 x 5= 5])

1. Select the odd one and note down the common feature of others.
 - (i) Monkey, Gorilla, Man, Orangutan
 - (ii) (a) Nerve cell---Nerve cell
(b) Nerve cell---Muscle cell
(c) Nerve cell---Glandular cell
(d) Nerve cell---Schwann cell
2. Analyse the word pair relationship and fill the blanks.
Anthrax : Bacteria
-----: Fungus
3. Correct and rewrite underline part of statements.
 - (a) The functions of neurotransmitters is to regulate the speed and direction of the impulses.
 - (b) The nerve is a group of dendron.
4. The vector used in genetic engineering.
(a) Ligase b) Plasmid c) tRNA d) rRNA
5. Identify and name the part "X" shown in the figure.

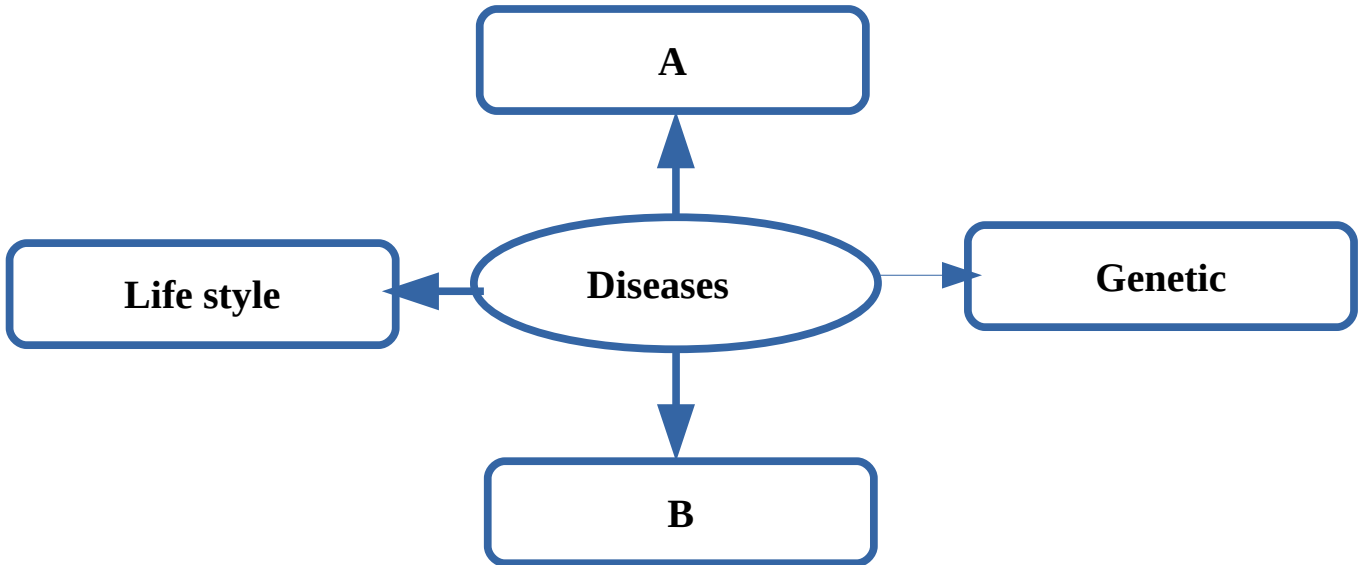


6. Glucose \xrightarrow{A} Glycogen
Identify "A"

(From question number 7 to 13 each one carries two score [2 x 6= 12])

7. DNA finger printing or DNA testing is useful to identify persons and prove crime.
 (a) Who developed this?
 (b) This technology also known -----.

8.



- (a) Identify A & B.
 (b) Write an example for genetic disease.

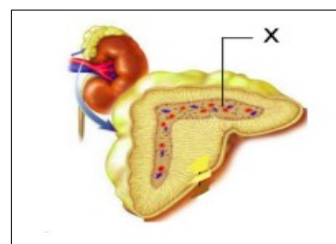
9. Match the following.

A	B
Lamarck	Mutation
Charles Darwin	Acquired characters
Hugo de Vries	Chemical evolution
Oparin and Haldane	Natural selection

10. Honey bees, termites etc. live in colonies due to the secretions of certain chemical substances that act as chemical messengers.
 (a) What is the name of this chemical substances?
 (b) Give two examples for this chemical substances.

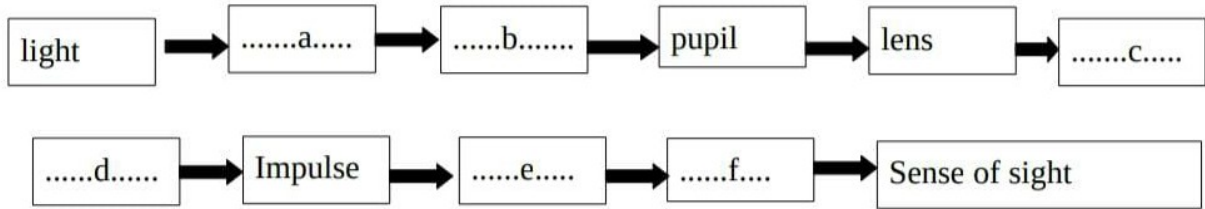
11. Observe the figure and answer the following questions.

- (a) Identify the gland X?
 (b) Name the hormones produced by X.



12. 'Dead and alive pathogens are used for vaccinations'. Justify this statement with the example of vaccines used for rabies and tuberculosis.

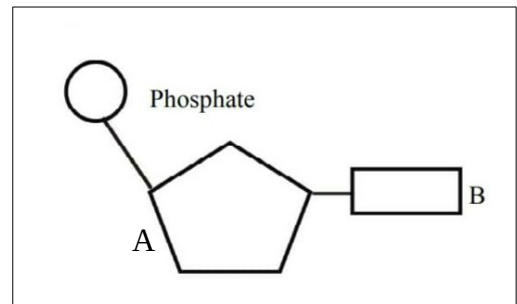
13. complete the flow chart related to vision.



(From question number 14 to 20 each one carries three score [3 x 5= 15])

14. Analyse the illustration given below and answer the questions.

- (a) What is the illustration in the indicate?
- (b) Identify the part A & B.



15. Complete the table suitably, about blood groups and their peculiarities.

Blood group	Antigen	Antibodies
-----	A	-----
B	B	-----
-----	A, B	-----
O	-----	a, b

16. Write three habits that we should practice to the health of the eye.

17. With help of indicators in the box given below, prepare a flow chart about Reflex action. Name the pathway of impulses in the reflex action.

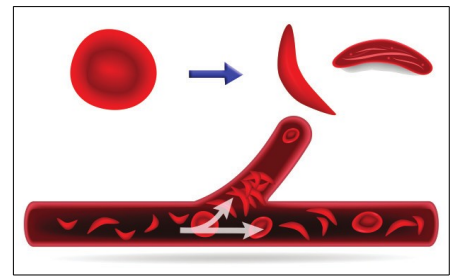
Related muscle, Receptor, Interneuron, Sensory neuron, Motor neuron

18. The following are the indicators of some disease affecting the nervous system. Identify the diseases from the symptoms and tabulate properly.

- * Continuous and irregular flow of electric charges in the brain.
- * Loss of body balance.
- * Destruction of ganglions.
- * Loss of memory.
- * Epilepsy due to the continuous muscular contraction.
- * Accumulation of insoluble protein in the neural tissues.

19. Change in the shape of RBC due to a genetic disease is shown in the figure.

- (a) Name the disease shown in the figure?
 (b) How does the deformity of RBC affect the body?

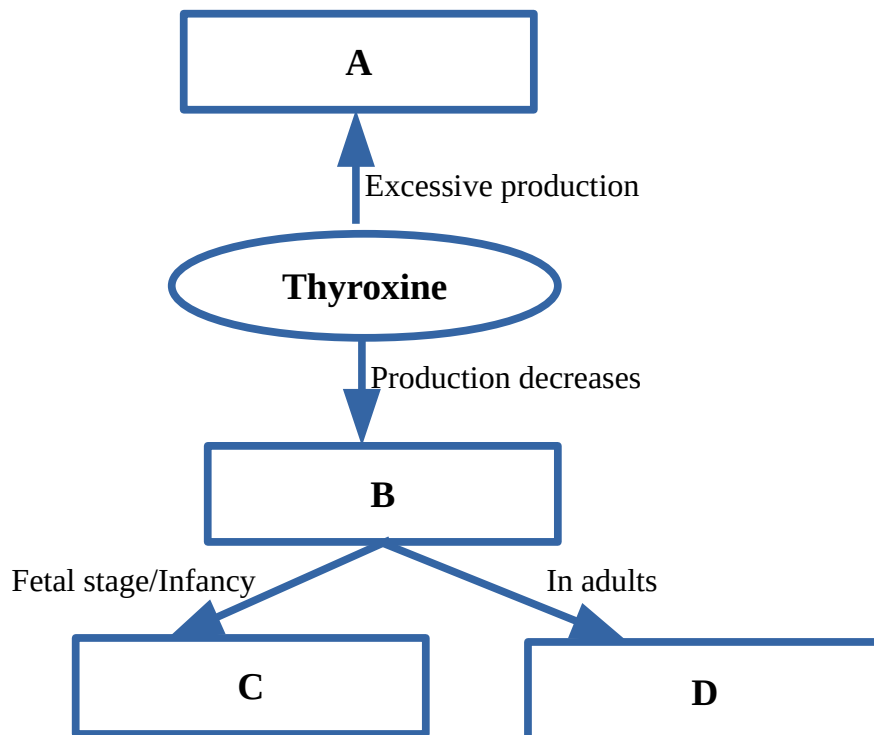


20. Make suitable word pairs from words given in the box below.

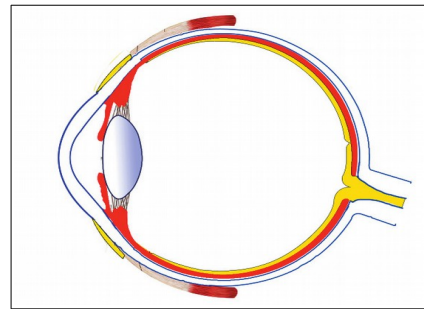
**Jacobson's organ, Ommatidia, Eye spot, Shark,
 Lateral line, Housefly, Snake**

(From question number 21 to 23 each one carries three score [4 x 2= 8])

21. Complete the illustration related to thyroxine.



22. Redraw the diagram below. Identify the name indicated and label the parts



- (a) The part refracts light rays into the eye.
- (b) The part that adjusts its size as the intensity of light varies.
- (c) The part of retina where plenty of photoreceptors are seen.

23. Complete the illustration related Natural selection.

