

SSLC Exam 2022

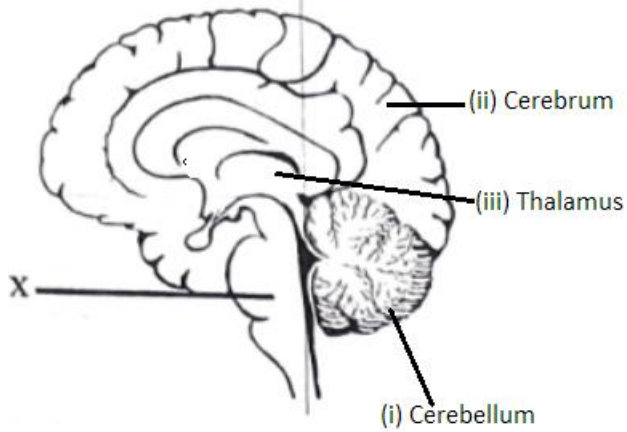
Biology Answer Key

By

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1	Cone Cell		
2	b. Amino Acid		
3	22+Y		
4	Ripening of Leaves and Fruits- Ethylene		
5	B Negative		
6	Plasmid		
7	Eye Spot		
8	Heartbeat to increase		
9	Bacteria → leptospira		
10	a. gene therapy b. Gene therapy is the method of curing genetic diseases by removing disease-causing genes from the genome and inserting normal functional genes.		
11	a. Cercopithecoidea b. Developed brain, free moving hands		
12	a. 44 b. Female, because sex chromosome is XX		
13.	A	B	C
	Cornea	The projected transparent anterior part of the sclera	Refracts light rays to focus on the retina
	Pupil	The aperture seen at the center of the iris	Regulates the amount of light falling on the eyes
	Yellow spot	The part of the retina where plenty of photoreceptors are present.	Point of maximum visual clarity'
14	a. Phermone b. Musk in the musk deer, civet on in civet cat, Bombycol in female silkworm c. Pheromones help in attracting mates, to inform the availability of food, to determine the path of travel and to inform about dangers.		
15.	a. Cell Wall b. Lignin, Cutin, Suberin c. A polysaccharide called callose prevents the entry of germs which have crossed the cell wall, through the cell membrane.		
16.	Tuberculosis		Malaria
	Spread through air Bacteria is the pathogen Loss of body weight, fatigue, persistent cough		Spread through Anopheles mosquito Protozoa is the pathogen High fever with shivering and profuse sweating

17	<p>a. myelin sheath</p> <p>b.</p> <ul style="list-style-type: none"> • Provide nutrients and oxygen to the axon. • Accelerate impulses. • Act as an electric insulator. • Protects the axon from external shocks. • Gives white appearance (white matter) to the neural parts.
18	<p>a. Sickle Cell Anemia</p> <p>b. The defects of genes cause deformities in the sequencing of amino acids which are the building blocks of haemoglobin. As a result of this, the structure of haemoglobin changes.</p> <p>c. Occurrence of fatigues weakness due to decreased transportation of oxygen into tissues</p>
19.	<p>a. i. r ii. Rr iii. Rr iv. rr</p> <p>b. Round Seed</p> <p>c. During gamete formation, the factors that determine a particular character segregate without getting mixed.</p>
20	<p>a. Theory of Natural Selection</p> <p>b.</p> <ul style="list-style-type: none"> ❖ Overproduction ❖ Struggle for existence ❖ Those with unfavourable variations are destroyed and survival of others ❖ Favourable variation are transferred to next generation ❖ Accumulation of variations inherited through generations ❖ Origin of new species
21	<p>a. Aqueous humor</p> <p>b. This fluid supplies nutrients and oxygen to cornea and lens.</p> <p>c. Glaucoma</p> <p>d. Laser surgery.</p>
22	<p>a. Thromboplastin</p> <p>b. Tissues of the wounded part degenerate to form the enzyme thromboplastin</p> <p>c.</p> <ul style="list-style-type: none"> • Tissues of the wounded part degenerate to form the enzyme thromboplastin. • Thromboplastin converts prothrombin in the plasma to thrombin. • Thrombin converts the fibrinogen in the plasma to fibrin. • Blood clot is formed by the entangling of platelets and red blood cells in the fibrin network.
23.	a.



b. Medulla oblongata. It controls involuntary actions like heartbeat and breathing.

24.

- a) X: Insulin Y: Glucagon
- b) Pancreas
- c) Diabetes
- d) Increased appetite and thirst/Frequent urination
- e) Synthesizes glucose from amino acids