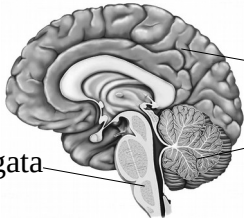


SSLC Model Evaluation Feb 2024 - BIOLOGY

Answer Key (English medium)		
1	Auxine.	5x1
3	Green (y).	
5	(d). (iv) correct.	
6	(c). DNA finger printing / profiling /testing.	
7	(a). Darwinism / Theory of Natural Selection. (b). Accumulation of variations, inherited through generations, leads to the formation of new species.	6x2
8	The eustachian tube in the middle ear helps in maintaining air pressure.	
9	(a). Y, because it is non-myelinated (myelin sheath is absent). (b). In X, because the myeline sheath accelerates impulses.	
10	(a). Sickle cell Anemia. (b). This defect is the deformities of haemoglobin, which is seen only in RBCs.	
11	(a). Convexity of lens in the eye. (b). The centre of vision in the cerebrum (the visual cortex) helps to see the real image.	
12	(a). (I) Viral Diseases. (b) (ii) Mosaic disease, (iii) Hepatitis.	
13	(a). Melanin. (b). Due to difference in the function of alleles of genes responsible for skin colour.	
14	(i). Primitive fossils have simple structure and recently formed fossils have complex structure shows an evolutionary change from simple to complex organisms. More over, certain fossils show connecting links between different species. OR (ii). Enzymes involved reactions, ATP molecules for storing energy, Genes determine hereditary etc. shows an existence of a common ancestor.	5x3
15	Student 2. The mRNA forms from DNA, which is seen inside the nucleus. It reaches the ribosome, which is seen in the cytoplasm. Protein synthesis occur in the ribosome.	
16	Substances responsible for taste dissolve in the saliva – Enter the taste bud – Stimulate chemo receptors – Generate impulses – Impulses reach cerebrum – Experience taste.	
17	(i). Callose prevents germs that have crossed the cell wall from entering the cell wall. (ii). Cuticle prevent the entry of germs through leaves. (iii). Bark protects the inner cells.	
18	Filariasis – Filarial worm – Through culex mosquito. Ringworm – Fungus – Through contact. Malaria – Protozoa – Through female Anopheles mosquito.	
19	(a). X= Pheromones. (b) (i), (ii) = Civetone or Muscone. (iii), (iv) -Informing about food, determining the path of travel, signalling dangers, helps to live in colonies etc. (any 2).	
20	(a). Step 1- Restriction endonuclease /Genetic scissors. Step 2 - Ligase /Genetic glue. (b). Plasmid acts as vector to carry the genes to another bacteria. (c). Yes, because it contains gene for insulin production. (Bacteria became genetically modified).	
21	(a). (i) B ^{+ve} (ii) a. (iii) Nil. (iv) a, b. (b). No, because of the presence of antigen B and D. These antigen will react with the antibodies in the recipient's blood, resulting agglutination.	
22	 <p>(b). Cerebrum.</p> <p>(c). Cerebellum.</p> <p>(a). medulla oblongata</p>	Prepared by Rasheed Odakkal , 9846626323 GVHSS Kondotty
23	(a). X. It contains the specific receptors for that hormone. (b). It binds with the respective receptor to form a hormone-receptor complex for cellular activities. (c). The releasing and inhibitory hormones of hypothalamus control the pituitary gland in the production of tropic hormones, which in turn stimulates certain other endocrine glands.	2x4 (40)