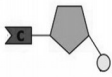
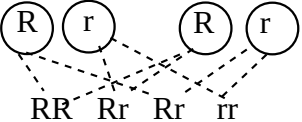


Second Terminal Evaluation 2023-24 BIOLOGY

Qn	Answer Key (English medium)							
1	c).  2. (a). Quickwilt in pepper - Fungus (c). Bunchy top of banana - Virus 3. (i). D / Rh (ii). a 4.(a). <u>keratin</u> (c). <u>B-lymphocytes</u>	5x1						
5	(b). Plasmodium (protozoa) : Anophelis mosquito.							
6	Student 3 : A. Dendrite B. Schwann cell C. Synaptic knob							
7	a). Rat fever (leptospirosis), Leptospira b). The toxins produced by these bacteria cause damage to blood vessels.	6x2						
8	Xerophthalmia – Prolonged deficiency of vitamin A Glaucoma – Failure in the reabsorption of aqueous humor Cataract – lens become opaque Colour blindness – Defect of cone cells							
9	a). Wrinkled seed (rr), During gamete formation the factors that determine a particular character segregate without getting mixed. b). $Rr \quad Rr$							
								
10	a). (i). toxins (ii). chemicals b). Reduces the rate of multiplication of pathogens, Increases the effect of phagocytosis.							
11	a). Medula b). Synthesis of glucose from protein and fat. Slows down the action of defense cells. Controls inflammation and allergy. c). Aldosteron. d). Maintains the salt- water level. Maintains blood pressure.							
12	a). Crossing over , In meiosis. b). Change occur in the normal distribuion of genes.							
13	a). Sickle cell anaemia, Due to change in the structure of haemoglobin and RBC . b). The sickle shaped RBCs get collected in the blood vessels and block the flow of blood.							
14	(a). Break down of stored food in seeds, Sprouting of leaves. (b). Cytokinin. (c). Auxin. (d). Auxin. (e). Ripening of leaves and fruits. (f). Abscisic acid.							
15	a). (i). Block of blood flow due to deposition of fat in coronary arteries. (ii). Smoking. b). Reduce faty or salty food items, Regular exercise, Avoid the habit of smoking.							
16	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 33%;">T Lymphocytes</th> <th style="width: 33%;">Basophil</th> <th style="width: 33%;">Antibodies</th> </tr> </thead> <tbody> <tr> <td>- Stimulates other defense cells of the body. - Destroy cancer cells.</td> <td>- Stimulates other white blood cells. - Dilates blood vessels.</td> <td>- Neutralize the toxin of the antigens. - Destroy the bacteria by disintegrating their cell membrane.</td> </tr> </tbody> </table>		T Lymphocytes	Basophil	Antibodies	- Stimulates other defense cells of the body. - Destroy cancer cells.	- Stimulates other white blood cells. - Dilates blood vessels.	- Neutralize the toxin of the antigens. - Destroy the bacteria by disintegrating their cell membrane.
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17	a). Vaccines are the substances used for artificial immunization. b). These act as antigens that stimulate to form antibodies, which retained in the body.	5x3						
18	a). i. 22+X ii. 22+Y iii. 44+XX iv. 44+XY b). Females have two X chromosomes and males have one X chromosome and one Y chromosome. This difference make the possibility of male-female ratio 1:1.							
19	a). Action of genes / Protein synthesis. b). X= mRNA. Since this RNA carries message from DNA, it is known as messenger RNA. From DNA, mRNA carries messages for protein synthesis to ribosomes.							
20	The sound waves – Tympanum vibrates – Ear ossicles – Oval window – Vibration of fluid in the cochlea – Stimulation of hair cells in the Organ of corti – Impulses form – Auditory nerve – Cerebrum – Hearing is effected.							
21	a).Diphtheria. Corynebacterium diphtheriae. b). The toxins produced by these bacteria destroy the cells in the mucus membrane. c). Treatment using antitoxins. d). Vaccination, wearing mask.							
22	a). Inflammatory response. b). Blood plasma and more white blood cells reach the wound site, WBCs reach the wound site							

23	<p>through the walls of the capillaries.</p> <p>c). Neutrophil, Monocyte.</p> <p>a). A- Hypothalamus. C- Pituitary (posterior lobe).</p> <p>b). Vasopressin (Anti Diuretic hormone-ADH), Diabetes insipidus.</p> <p>c). Oxytocin, Facilitates child birth by stimulating the contraction of smooth muscles, Facilitates lactation.</p>	<p>2x4</p> <p>(40)</p>
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