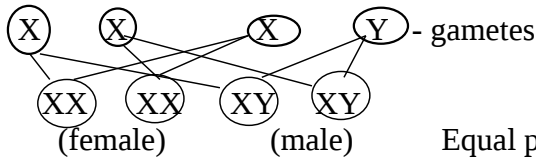


X- BIOLOGY Second Terminal Evaluation 2016-'17

Qn	Answer Key / Hints	Score	Total
1	a).Antigen D (Rhfactor) b). In the cell membrane of the red blood cells.	1+1	2
2	B). Sickle cell anaemia.	1	1
3	a). X- Amino acids, Y- Protein. b). Ribosome. . mRNA, tRNA, rRNA	1+2	3
4A	a). B lymphocyte and T lymphocyte. b). B lymphocytes mature in the bone marrow and T lymphocytes in the thymus gland c). HIV multiplies with in the lymphocytes to cause its destruction. The considerable decrease in the number of lymphocytes reduces the immunity of the body.	1+1+2	OR
4B	a). Neutrophil, Basophil, Eosinophil and Monocyte. b). Neutrophils and monocytes engulf and destroy germs. Basophils stimulates the other white cells / dialate blood vessels. Eosinophils produce substance to destroy foreign bodies or for inflammatory response	2+2	
5	a). Haemophilia. b). This is a genetic disorder, Non pathogenic disorder.	1+2	4
6A	a). Sex chromosomes. b). i- X , ii- X, iii- X or Y, iv- X or Y c). (XX)mother (XY)father		3
	 <p>Equal possibility of male or female children(1:1)</p>	1+1+2	OR
6B	a). i-Tall, red flowers, ii- ttrr, iii- tr, iv- Tall, red flowers b). Dwarf with red flowers – ttRR, ttRr Tall with white flowers -- TTrr, Ttrr	2+2	
7	a). Malaria, Protozoa (plasmodium) b). Dengue fever, Virus c). Increase in the number of mosquitoes due to contaminated surroundings. (Avoid situations that lead to the multiplication of mosquitoes)	1+1+2	4
8	a). A, B, AB, O b).Situations that need blood transfusion (like surgery, severe blood loss on accidents, treatment) may arise the immediate requirement of compatible group blood.	1+1	2
9	b). Insulin producing bacteria Genetic engineering.	1+1	2
10	c). i, iv correct.	1	1
11	a).The enzyme thromboplastin converts prothrombin protein to thrombin. b). Thrombin converts fibrinogen (a plasma protein) to fibrin filaments.	1+1	2
12	Banana - Bunchy top - Virus Paddy - Blight - Bacteria Coconut palm – Bud rot - Fungus	(?)	2
13	a). Entry of germs through a wound or an infection occur. b).Blood flow increases and there fore plasma and white blood cells from the vessel reach the wound site. c).Inflammatory response helps white blood cells to destroy the germs.	1+1+1	3
14	a).Lifestyle diseases. b).Yes. Otherwise a chance of diseases like diabetes, stroke, fatty liver,Heart attack, Hypertension, Lung cancer, Emphysema, or Bronchitis create problems.	1+2	3
15	a). 5 b). (Completed illustration with second strand using A, C, T nucleotides)	1+3	4
			40