

FIRST TERMINAL EVALUATION 2022-23
ANSWER KEY
BIOLOGY(ENG MED) STD: X

QNO	VALUE POINTS	SCORE	TOT
1	b) Bat	1	1
2	a) Hypothalamus $\xrightarrow{\text{TSH}}$ Pituitary	1	1
3	Haemoglobin : 9.2g/100ml Blood	1	1
4	a) Culex, c) Fungus	$\frac{1}{2} + \frac{1}{2}$	1
5	To measure the Blood Pressure: Sphigmo manometer	1	1
6	(TR) (Tr)	$\frac{1}{2} + \frac{1}{2}$	1
7	Skin prevent the germs by keratin, sebum, sweat produced by epidermis, sebaceous gland, sweat gland respectively. Pathogens trapped in the mucus get destroyed.	1 1	2
8	a)Thymin Nucleotide b) DNA, because Thymin Nitrogen base present only in DNA	1 1	2
9	Yes. The XY chromosomes of the father determine whether the child is male or female. Child with XX sex chromosomes is female and one with XY sex chromosomes is male.	1 1	2
10	a) Tuberculosis b) When the patient speaks, coughs or sneezes, the pathogens spread into the air and thereby to others.	1 1	2
11	a) Lymph b) Lymph contains plenty of lymphocytes. They destroy the disease causing bacteria in lymph nodes and spleen.	1 1	2
12	a) Crossing over of chromosomes b) part of a DNA crosses over to become the part of another DNA. This causes a difference in the distribution of genes. When these chromosomes are transferred to the next generation, it causes the expression of new characters in offsprings	1 1	2
13	a) Blight b) Brinjal c) Quick wilt d) coconut.	$\frac{1}{2} \times 4$	2
14	Nervous system: Stroke, Addiction to nicotine Respiratory System: Lung cancer, Bronchitis, Emphysema Blood Circulatory System: Hypertension, Loss of elasticity of arteries, Decrease in functional efficiency	1 1 1	3
15	Callose- The germs that have crossed the cell wall are prevented from entering through the cell membrane. Bark- Protects the inner cells from direct contact of pathogens. Wax covering, Cuticle- Prevents the entry of germs through leaves.	1 1 1	3
16	a) Antibiotics b) Bacteria c) regular use develops immunity in pathogens against antibiotics.	1 1 1	3
17	a) X= Ovary b) Estrogen:- Controls secondary sexual characters, ovulation, menstrual	1 2	3

	cycle etc. OR Progesterone:- Controls ovulation, menstrual cycle and implantation of embryo in the uterus.		
18	a) (i) mRNA, (ii) tRNA b) From DNA c) rRNA, Ribosomes	1 1+1	3
19	a) (i) civetol (ii) bombykol b) Pheromones c) Pheromones help in attracting mates, informing the availability of food, determining the path of travel, signalling dangers etc (ANY TWO)	1 1 1	3
20	a) (i) TT (ii) t (iii) Tt (iv) tt b) during gamete formation the factors that determine a particular character segregate without getting mixed	2 1	3
21	a) Haemophilia b) Genetic Diseases c) Haemophilia is the condition in which excess blood is lost even through minor wounds. d) Temporary relief is brought in by identifying and injecting the deficient protein	1 1 1 1	4
22	(i) Acromegaly (ii) excessive production of somatotropin after the growth phase (iii) Gigantism (iv) the production of somatotropin increases during the growth phase (v) excessive growth of the body (vi) Dwarfism (vii) production decreases during the growth phase (viii) Retardation of growth	½X8	4
23	a) Inflammatory Response, Fever b) by Phagocytosis-The pathogens are degenerated and destroyed by the enzymes in lysosome.c) <ul style="list-style-type: none"> Tissues and platelets at the site of wound degenerate to form the enzyme called thromboplastin. Prothrombin in plasma $\xrightarrow[\text{Calcium, Vitamin K}]{\text{Thromboplastin}}$ Thrombin Fibrinogen $\xrightarrow{\text{Thrombin}}$ Fibrin fibres The red blood cells and platelets get entangled in the network of fibrin fibres to form the blood clot. 	1 1 2	4

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