


**SECOND YEAR HIGHER SECONDARY EXAMINATION (SAY)
JUNE-2019**

Subject : ZOOLOGY

Code No : SY 26

Qn No	Sub Qns	Answer Key /Value Points	Score	Total Score
1	d	d/Fertilization-Zygote-Cleavage-Morula-Blastula-Implantation	1	1
2	a b	Mating/Marriage Mating/Marriage between Relatives(Consanguineous mating)	½ ½	1
3		Erwin Chargaff/Erwin/Chargaff	1	1
4	a	<p>F₁ Recessive parent Ww x ww</p>  <p>OR Correct definition</p>	1	2
	b	To predict the genotype of Test organism (To find out the unknown genotype)	1	
5	a	AIDS/HIV infection	1	
	b	Making blood safe from HIV (from blood bank) and ensure disposable needles and syringes in public and private hospitals OR Any one Correct Response related to it	1	2
6	a b c d	Citric Acid - <i>Aspergillus niger</i> Acetic acid - <i>Acetobactor aceti</i> Lactic Acid - <i>Lactobacillus</i> Butyric acid - <i>Clostridium butylium</i>	½ ½ ½ ½	2
7	a b	Gynaecomastia - Klinefelter's Syndrome/44A+XXY (47) Rudimentary Ovary and lack of Secondary Sexual characters - Turner's Syndrome / 44A+X0) OR Any correct response related to it carries 2 scores (Non dys junction of sex chromosomes ,Aneuploidy,Chromosomal disorder,Failure of segregation of chromosomes)	1 1	2

8		A- Hydrogen bond, B- Phospho ester bond C- Phospho diester bond D- Glycosidic bond (Any 2 correct response carries Full Score)	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
9	a b	Pituitary/Adeno hypophyses/ Anterior pituitary- 14 th day/ or middle of the Menstrual Cycle LH acts on Leydig cells and stimulates the synthesis of Androgens /Spermatogenesis	1 1	2
10		Microbes can fix the atmospheric Nitrogen/Phosphorus/Organic farming <i>Blue green algae/Rhizobium/Azospirillum/Azotobacter/Glomus(Mycorrhiza)</i> (Any one Example carries One Score)	1 1	2
11	a b c d	500 mya - Any attempt 350 mya -Jawless fish/Fish with Stout Fin 320 - Sea weeds/Plants 200 mya - Reptiles (Any 2 correct response carries Full Score)	$\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	2
12		Translation / Protein Synthesis (Any 2 Points related to Protein Synthesis carries 1 Score)	1 1	2
13		Over production- Struggle for existence - Variation -Survival of the fittest -- Natural selection - Origin of species (Any 4 in correct sequence full Score) (Any 2 correct Sequence 1 Score)	2	2
14		a) Antibody/ Immuoglobulin/Ig b)1. Humoral Immune Response (Antibody mediated Immunity) 2. Cell Mediated Immunity (CMI) OR Primary and Secondary Immune Response (Any one correct response in B carries 1 Score)	1 1	2
15	a b c	Opoid - Depressant/Effect on CNS/Gastro Intestinal Tract Cannaboids -Effect on Brain/Cardiovascular system of the body	1 1	3

		Coca Alkaloids - Stimulant/euphoria/Hallucination/Interference of Dopamine/Effect on CNS (Any relevant response related to the effect of Drugs on Body functions-Full Score)	1	
16	a	a) Test tube baby programme/ART b) ZIFT/IUT/ET (Any one method with Explanation/Name of any 2 methods carries 2 Score)	1 2	3
17		<i>In-situ Conservation</i> and <i>Ex-situ Conservation</i>-suitable Explanation with 2 Examples Each- Full Score	3	3
18		3 Types of RNA Polymerase Enzymes in Eukaryotes Presence of Introns and Exons / Processing of hnRNA/Splicing,Capping,Tailing	1 ½ 1 ½	3