YEAR 10 A-F - BIOLOGY

WEEK 5 (27th September to 1st October)

Work sent to students through Class Bio Whats App Group/G mail/Google Classroom

SB 3B3j-Gene Mutation

L.O- State that there is usually extensive genetic variation within a population of a species and these arise through mutations. State that most genetic mutations have no effect on phenotype, some mutations have a small effect on the phenotype.

	ZOOM SESSION:-
Sunday – 3rd Period (Boys)	
Sunday – 5th Period (Girls)	Students must watch the video link given below on
	https://www.youtube.com/watch?v=RXmpVboM040
	https://www.youtube.com/watch?v=37VqMXDYb0U
	Read Text book Page-70-71
	Complete Qn 4-5 and Exam style question
	Resources: PowerPoint /Board work &Video link
	Students able to:
	●Define Mutation ●Identify the cause of mutations
	•Describe how gene mutations change the DNA sequence. •Explain how sickle cell mutation and mutation in the coding and non coding region. •Beneficial effects of mutation •Categorise mutations as harmful, beneficial and neutral in humans with examples.

SB3e- Genetic variants and phenotypes

L.O- Describe how genetic variants in the non-coding DNA of a gene can affect phenotype by influencing the binding of RNA polymerase and altering the quantity of protein produced. Describe how genetic variants in the coding DNA of a gene can affect phenotype by altering the sequence of amino acids.

Monday-4th period (Boys)	ZOOM SESSION-
Wednesday-4th period (Girls)	Students must watch the video link given below on

https://www.youtube.com/watch?v=M4ut72kfUJM

Read Text book Page-60-61

Complete Qn 7-8 and E1question

Resources: PowerPoint /Board work &Video link

Students able to:

- Identify the role of RNA polymerase in protein synthesis.
- Factors altering the quantity of proteins produced .
- Differentiate introns and exons

$\begin{array}{l} Tuesday \cdot 1^{st} \ \& \ 2^{nd} \ Period \ (Girls) \\ Thursday \cdot 1^{st} \& 2^{nd} \ \ Period \ (Boys) \end{array}$

Zoom: GL PRACTICE: Students to complete the GL practice WS. Discussion and clarifying doubts, if any.

Resources: Worksheet

Students able to understand/describe:

- •Structure and function of living organisms
- Photosynthesis & Cellular respiration in organisms
- Interactions and interdependencies within ecosystem
- Genetics and evolution