

## YEAR 9 A - F – BIOLOGY

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

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

### SB2-Cells and control

**L.O** –Describe mitosis as part of the cell cycle including the stages interphase, prophase, metaphase, anaphase and telophase and cytokinesis

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| <b>Sunday-Zero period( boys)</b><br><b>Sunday-7<sup>th</sup> period(girls)</b>               | <b>Zoom session:</b> Cell cycle<br><br><b>Resources :</b> Board works & Video link<br><a href="https://www.youtube.com/watch?v=NwwcWqL5hhI">https://www.youtube.com/watch?v=NwwcWqL5hhI</a><br><br><b>Students able to</b> <ul style="list-style-type: none"><li>●Identify &amp;<b>explain</b> the various phases of cell cycle – Interphase –G1, S &amp; G2, mitosis/meiosis &amp; Cytokinesis.</li><li>●Predict the time taken for the different stages of the cell cycle if a culture of cells is dividing every 48 hrs.</li></ul>   |
| <b>Wednesday-2<sup>nd</sup> period (girls)</b><br><b>Sunday -1<sup>st</sup> period(boys)</b> | <b>Zoom Session:</b> Mitosis<br><br><b>Resources:</b> Board works & Video link<br><a href="https://www.youtube.com/watch?v=DwAFZb8juMQ">https://www.youtube.com/watch?v=DwAFZb8juMQ</a><br><br><b>Students able to</b> <ul style="list-style-type: none"><li>●<b>Describe</b> the various stages of mitosis – prophase, metaphase, anaphase &amp; telophase.</li><li>●Explain the process of cytokinesis in cells following mitosis.</li><li>●Organize the diagrams given related to mitosis in sequence</li><li>●Calculate the time taken for each stage of mitosis from the data given.</li><li>●<b>Distinguish</b> the various stages of mitosis – prophase, metaphase, anaphase &amp; telophase</li></ul> |
| <b>Sunday-2<sup>nd</sup> period(boys)</b><br><b>Wednesday -3<sup>rd</sup> period(girls)</b>  | <b>GC</b><br>Students to complete the text book questions on page 30 turn in their work in GC.  |

## YEAR 10 A-F – BIOLOGY

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

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

### SB4e-BREEDS & VARIETIES

L.O- Explain selective breeding and its impact on food plants .

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| <p>Sunday – 3<sup>rd</sup> Period (Boys)</p> <p>Sunday – 5<sup>th</sup> Period (Girls)</p> | <p><b><u>ZOOM SESSION/GOOGLE MEET</u></b></p> <p>Students must watch the video link given below on</p> <p><a href="https://www.youtube.com/watch?v=3B4LEssKSLs">https://www.youtube.com/watch?v=3B4LEssKSLs</a></p> <p><a href="https://www.youtube.com/watch?v=agfIZjNEsas">https://www.youtube.com/watch?v=agfIZjNEsas</a></p> <p>Read Text book Page- 84</p> <p>Complete questions 3 and 4</p> <p><b>Resources:</b> PowerPoint /Board work &amp;Video link</p> <p><b>Students able to:</b> •What is the significance of plant breeding programmes to overcome world food shortage? •<b>Describe</b> how selective breeding is done to produce plant of desired traits. •<b>Explain</b> the impact of selective breeding on domesticated plants . •<b>Describe</b> why new breeds and varieties are created.</p> |
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### SBf4e,g-Breeds and varieties,Genes in Agriculture and medicine

L.O- Explain selective breeding and its impact on Animals

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| <p>Monday-4<sup>th</sup> period (Boys)</p> <p>Tuesday -1<sup>st</sup> Period (Girls)</p> | <p><b><u>ZOOM SESSION/GOOGLE MEET</u></b></p> <p>Students must watch the video link given below on</p> <p><a href="https://www.youtube.com/watch?v=99nEQd2k6k4">https://www.youtube.com/watch?v=99nEQd2k6k4</a></p> <p><a href="https://www.youtube.com/watch?v=ua1_n9YA750">https://www.youtube.com/watch?v=ua1_n9YA750</a></p> <p>Read Text book Page- 84&amp; 88</p> <p>Complete page 84 question 1 &amp;2,Page 88-qn 2-4</p> <p><b>Resources:</b> PowerPoint /Board work &amp;Video link</p> <p><b>Students able to:</b> •Describe how selective breeding is carried out. •<b>Explain</b> the impact of selective breeding on animals. •<b>Evaluate</b> the benefits and risks of using selective breeding. •<b>Describe</b> why new breeds and varieties are created.</p> |
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## **SB4g-Genes in Agriculture and Medicine**

**L.O-** Describe genetic engineering as a process which involves modifying the genome of an organism to introduce desirable characteristics. Describe the main stages of genetic engineering including the use of: a. restriction enzymes b. ligase c. sticky ends d. vectors..

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| <p><b>Tuesday -2<sup>nd</sup> Period (Girls)</b><br/><b>Thursday-1<sup>st</sup> Period(Boys)</b></p>   | <p><b><u>ZOOM SESSION/GOOGLE MEET</u></b></p> <p><b>Students must watch the video link given below on</b></p> <p><a href="https://www.youtube.com/watch?v=LP5TctAPPUI">https://www.youtube.com/watch?v=LP5TctAPPUI</a></p> <p><a href="https://www.youtube.com/watch?v=gu9T91GJXDo">https://www.youtube.com/watch?v=gu9T91GJXDo</a></p> <p>Read Text book Page- 85 &amp;89</p> <p>Complete Page 89 qn 1,7,E1 and Exam style question.</p> <p><b>Resources:</b> PowerPoint /Board work &amp;Video link</p> <p><b>Students able to :</b>●Recall genetic engineering. Identify the use of plasmids of bacterium as vectors in genetic engineering. ●<b>Describe</b> the main stages of genetic engineering. ● <b>Describe</b> the use of restriction enzymes to cut DNA at specific sites and ligase enzymes to join pieces of DNA together. ●<b>Explain</b> how plasmids and viruses can act as vectors, which take up pieces of DNA, then insert this recombinant DNA into other cells.</p> |
| <p><b>Wednesday-4<sup>th</sup> period (Girls)</b><br/><b>Thursday-2<sup>nd</sup> Period (Boys)</b></p> | <p><b>GOOGLE CLASSROOM</b></p> <p><b>Students to complete the worksheet SB 4e.2 and turn in their work in Google Classroom.</b></p>  |

## YEAR 11 G& H – BIOLOGY (IGCSE)

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

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

### Topics 19 & 20 : Natural Selection & Evolution & Selective breeding.

**L.O.:** Explain Darwin's theory of evolution by natural selection and how resistance to antibiotics can increase in bacterial populations. Understand how selective breeding can develop plants and animals with desired characteristics

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| <p><b>Sunday- 4<sup>th</sup> period</b></p>                      | <p><b>Zoom: Understand</b> the work of Darwin and Darwin's theory of evolution by natural selection.<br/> <b>Resources:</b> Textbook, Video Links &amp; Power point<br/> <a href="https://www.youtube.com/watch?v=TOB6os-6uuc">https://www.youtube.com/watch?v=TOB6os-6uuc</a><br/> <a href="https://www.youtube.com/watch?v=s64Y8sVYfFY">https://www.youtube.com/watch?v=s64Y8sVYfFY</a><br/> <u>Textbook page : 261- 267</u><br/> <b>Students able to:</b><br/> <ul style="list-style-type: none"> <li>●<b>Define</b> natural selection. ●<b>Explain</b> Darwin's theory of evolution by natural selection with given examples. ●<b>Justify</b> why was Darwin's theory of evolution better than earlier theories.</li> </ul> </p>                                 |
| <p><b>Monday- 7<sup>th</sup> period</b></p>                      | <p><b>Zoom: Describe</b> how antibiotic resistance can increase in bacterial populations and its consequence.<br/> <b>Resources:</b> Textbook, Video Links &amp; Power point<br/> <a href="https://www.youtube.com/watch?v=L8XYxNqEJqI">https://www.youtube.com/watch?v=L8XYxNqEJqI</a><br/> <u>Textbook page : 261- 267</u><br/> <b>Students able to:</b><br/> <ul style="list-style-type: none"> <li>●<b>Define</b> the term resistance . ●<b>Predict</b> how pesticide resistance evolved in insects. ●<b>Explain</b> how the development of resistance in organisms supports Darwin's theory. ●<b>Describe</b> the concept of evolution of MRSA bacteria.</li> </ul> </p>  |
| <p><b>Tuesday – 3<sup>rd</sup> and 4<sup>th</sup> period</b></p> | <p><b>Zoom: Describe</b> how selective breeding can develop plants and animals with desired characteristics<br/> <b>Resources:</b> Textbook, Video Links &amp; Power point<br/> <a href="https://www.youtube.com/watch?v=ad4yB63tryI">https://www.youtube.com/watch?v=ad4yB63tryI</a><br/> <a href="https://www.youtube.com/watch?v=swkkHMsQEus">https://www.youtube.com/watch?v=swkkHMsQEus</a><br/> <u>Textbook page : 268- 275</u><br/> <b>Students able to:</b><br/> <ul style="list-style-type: none"> <li>●<b>Describe</b> how Traditional selective breeding is carried out.</li> <li>●<b>Explain</b> the stages of micro propagation ●<b>Evaluate</b> the benefits and risks of using selective breeding to produce new varieties and breeds</li> </ul> </p> |
| <p><b>Wednesday – 5<sup>th</sup> period</b></p>                  | <p><b>GC:</b> Students complete textbook questions pgs (267) on Natural Selection and turn in their work on GC<br/> <b>Resources:</b> Textbook</p>   |

## YEAR 11 A – F - BIOLOGY (GCSE)

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

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

### Topics–SB 8c–Circulatory system& SB8d-The Heart

**L.O** – Explain how the structure of the blood vessels is related to their function. Explain how the structure of the heart and circulatory system is related to its function, including the role of the major blood vessels, the valves and the relative thickness of chamber walls. Calculate heart rate, stroke volume and cardiac output, using the equation  $\text{cardiac output} = \text{stroke volume} \times \text{heart rate}$

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| <p><b>Sunday-6 th period</b><br/>(girls)</p> <p><b>Sunday-8 th period</b><br/>(boys)</p>              | <p><b>Zoom session-Types of blood vessels &amp;how the blood vessels adapted to their function.</b></p> <p><b>Resources :</b> Board works &amp; Video link<br/><a href="https://www.youtube.com/watch?v=CjNKbL_-cwA">https://www.youtube.com/watch?v=CjNKbL_-cwA</a><br/><a href="https://www.youtube.com/watch?v=MFydNeGomec">https://www.youtube.com/watch?v=MFydNeGomec</a></p> <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>●Enlist types of blood vessels in human body .●Describe the structure of arteries, veins and capillaries and understand their roles.</li><li>●Recall the general plan of the circulation system to include the blood vessels to and from the heart, the lungs, the liver and the kidneys. ●Give <b>two</b> differences in the structure of artery, vein &amp; capillary. ●Describe the role of artery, capillary &amp; vein for transport.</li></ul> <p><b>Discussion of textbook questions.(page 166 &amp; 167)</b></p> |
| <p><b>Monday -3 rd period</b><br/>(girls)</p> <p><b>Tuesday -5<sup>th</sup> period</b><br/>(boys)</p> | <p><b>Zoom session –Structure and Functions of various parts of heart</b></p> <p><b>Resources :</b> Board works &amp; Video link<br/><a href="https://www.youtube.com/watch?v=QW9GpeeKhT8">https://www.youtube.com/watch?v=QW9GpeeKhT8</a></p> <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>●Label the major parts of the human heart- Atrium, ventricle, valves, aorta, pulmonary artery, pulmonary vein, vena cava ●The role of the major blood vessels, the valves and the relative thickness of chamber walls.</li></ul> <p><b>Discussion of textbook questions.(page 168)</b></p>   |

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| <p><b>Tuesday-7<sup>th</sup> period (girls)</b></p> <p><b>Wednesday-6<sup>th</sup> period (boys)</b></p>    | <p><b>Zoom Session–Structure and Functions of various parts of heart.</b><br/>Resources: Board works &amp; Video link</p> <p><a href="https://www.youtube.com/watch?v=jBt5jZSWHMI">https://www.youtube.com/watch?v=jBt5jZSWHMI</a><br/><a href="https://www.youtube.com/watch?v=aJRduIb5YS4">https://www.youtube.com/watch?v=aJRduIb5YS4</a></p> <p><b>Students able to</b></p> <ul style="list-style-type: none"> <li>●Describe the structure and function of the various parts of the human heart – Atrium, ventricle, valves, aorta, pulmonary artery, pulmonary vein, vena cava.</li> <li>●Explain how does the heart pump blood</li> <li>●Distinguish the thickness of walls of the right &amp; left sides of the heart.</li> </ul> <p><b>Discussion of textbook questions.(page 169)</b></p>  |
| <p><b>Tuesday- 8<sup>th</sup> period (girls)</b></p> <p><b>Thursday – 5<sup>th</sup> period (boys)</b></p>  | <p><b>Zoom session-Cardiac output</b><br/>Resources : Board works &amp; Video link</p> <p><a href="https://www.youtube.com/watch?v=5DCduYhSutA">https://www.youtube.com/watch?v=5DCduYhSutA</a><br/><a href="https://www.youtube.com/watch?v=YEvm-Otmpw4">https://www.youtube.com/watch?v=YEvm-Otmpw4</a></p> <p><b>Students able to</b></p> <ul style="list-style-type: none"> <li>●Define terms cardiac output ,stroke volume &amp; heart rate</li> <li>●Analyze the trends &amp; patterns from the result table given related to stroke volume&amp; heart rate</li> <li>●Draw conclusions from the result table given related to cardiac stroke volume&amp; heart rate</li> <li>● Calculate the cardiac output from the formula given:<br/><b>cardiac output = stroke volume × heart rate</b></li> </ul> <p><b>Discussion of textbook questions.(page 169)</b></p> |
| <p><b>Wednesday-7<sup>th</sup> period (girls)</b></p> <p><b>Thursday – 6<sup>th</sup> period (boys)</b></p> | <p><b>Google Classroom</b></p> <p>Students to complete the text book questions on page 168&amp; 169&amp; turn in their work..</p>   |

## YEAR 12 - Batch 1 & 2 - BIOLOGY

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

Work sent through Google classroom/G mail/Online Quiz/ZOOM Learning Platform

Topic 4.1.2 & 3 Exchange and transport

L.O - Fluid mosaic model of cell membrane ,diffusion ,facilitated diffusion and active transport.

Biology Students Book 1

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| <p>B1- Sunday – 8th period (Zoom)</p> <p>B2- Tuesday – 3rd period (Zoom)</p>                    | <p><b>Discussion - Introduction to core practical skills</b></p> <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>●Identify key practical areas for core practicals</li><li>●Differentiate reliability, validity &amp; variability in experimental data</li><li>●Draw &amp; label appropriate graphs related to experimental data</li></ul> <p><b>Resource : Practical skill booklet</b></p>  |
| <p>B1 - Monday – 1st &amp; 2nd period (Zoom)</p> <p>B2- Thursday – 5th and 6th period(Zoom)</p> | <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>● <b>Analyse</b> the importance of osmosis in cells</li><li>●<b>Investigate</b> the effects on plant cells of immersion in solutions of different water potential.</li><li>●<b>Differentiate</b> hypertonic, hypotonic and isotonic solution.</li><li>●<b>Explain</b> how the properties of molecules affect how they are transported, including solubility, size and charge</li><li>●<b>Explain</b> how passive transport is brought about in the cell by osmosis</li><li>●Outline the roles of membranes within cells and at the surface of cells in osmosis</li></ul> <p><b>BOARD WORKS –Transport across the membrane No – 1-15</b></p> <p><b>Video and PPT: Structure of cell membrane and osmosis.</b></p> <p><b>Websites:</b><a href="http://www.science.co.uk/biology/cellmembrane.html">www.science.co.uk/biology/cellmembrane.html</a>,<br/><a href="http://www.internet4classrooms.com">www.internet4classrooms.com</a></p> <p>Animations of osmosis principles and effect on red blood cells are available on the Internet.</p> <p>Animations of plasmolysis and water potential in plant cells are available at <a href="http://www.kscience.co.uk">www.kscience.co.uk</a></p> <p><b>Text Book Page Numbers – 214-219</b></p> |

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| <p><b>B1 - Monday 2nd period</b></p> <p><b>B2- Thursday –6th period</b></p> | <p><b>GC-Asynchronous learning</b></p> <p><b>Text book questions-. Answer the questions given on page 215 &amp;219 and task to be turned in Google classroom</b></p> <p><b>Text Book Page Numbers – 215-219</b></p> |
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## **YEAR 12 - Batch 1 - BIOLOGY**

**WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)**

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

**Topic 2.3 – The Cell Cycle**

**L.O – Describe the role of mitosis and the cell cycle for growth and asexual reproduction.**

**Biology Students Book 1**

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| <p><b>B1- Tuesday– 4<sup>th</sup> period(Zoom)</b></p>                       | <p><b>Students able to</b></p> <ul style="list-style-type: none"> <li>● Identify the various phases of cell cycle – Interphase –G1, S &amp; G2, mitosis/meiosis &amp; Cytokinesis.</li> <li>● Describe the conversion of chromatin to metaphase chromosome during cell cycle .</li> <li>● <b>Explain</b> the various phases of cell cycle – Interphase –G1, S &amp; G2, mitosis/meiosis &amp; Cytokinesis</li> </ul> <p><b>Resources:</b> Boardworks &amp; PowerPoint - Cell division &amp; Video link</p> <p><a href="https://www.youtube.com/watch?v=gbSIBhFwO4s">https://www.youtube.com/watch?v=gbSIBhFwO4s</a></p> <p><a href="https://www.youtube.com/watch?v=MsQHwXfYkAs">https://www.youtube.com/watch?v=MsQHwXfYkAs</a></p> <p><a href="https://www.youtube.com/watch?v=gTZ_vj-HdzM">https://www.youtube.com/watch?v=gTZ_vj-HdzM</a></p> <p><b>Students to draw &amp; label the various stages of mitosis – prophase , metaphase, anaphase &amp; telophase as seen using the microscope</b></p> |
| <p><b>B1- Thursday– 1<sup>st</sup> &amp; 2<sup>nd</sup> period(Zoom)</b></p> | <p><b>Students able to</b></p> <ul style="list-style-type: none"> <li>● Identify &amp; describe the various stages of mitosis – prophase , metaphase, anaphase &amp; telophase</li> <li>● <b>Compare</b> cytokinesis in plant &amp; animal cell.</li> <li>● <b>Role of cyclins</b> controlling cell cycle</li> </ul> <p><b>Resources:</b> Boardworks &amp; PowerPoint - Cell division &amp; Video link</p> <p><a href="https://www.youtube.com/watch?v=no68mby0esc">https://www.youtube.com/watch?v=no68mby0esc</a></p> <p><a href="https://www.youtube.com/watch?v=DwAFZb8juMQ&amp;t=104s">https://www.youtube.com/watch?v=DwAFZb8juMQ&amp;t=104s</a></p> <p><a href="https://www.youtube.com/watch?v=vAwaCimtwq4">https://www.youtube.com/watch?v=vAwaCimtwq4</a></p> <p><b>Students to complete text book questions pg.113</b></p>  |



## YEAR 12 - Batch 2 - BIOLOGY

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

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

### Topic 2.3 – Asexual Reproduction

L.O – Role of mitosis in asexual reproduction in plants and animals

Biology Students Book 1

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| <p><b>B2- Monday – 5<sup>th</sup> &amp; 8<sup>th</sup> period(Zoom)</b></p> | <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>● <b>Identify</b> ways of asexual reproduction in organisms – Binary fission, Sporulation, Budding &amp;Vegetative reproduction</li><li>● <b>Describe</b> ways of asexual reproduction in organisms – Binary fission, Sporulation, Budding &amp;Vegetative reproduction</li><li>● <b>Significance</b> of regeneration &amp; parthenogenesis in animals</li></ul> <p><b>Resources:</b> Boardworks &amp; PowerPoint - Asexual reproduction &amp; Video link</p> <p><a href="https://www.youtube.com/watch?v=VN_p20dDrnY">https://www.youtube.com/watch?v=VN_p20dDrnY</a><br/><a href="https://www.youtube.com/watch?v=2WNoErUFAvI">https://www.youtube.com/watch?v=2WNoErUFAvI</a><br/><a href="https://www.youtube.com/watch?v=6Ew6mqwgGR0">https://www.youtube.com/watch?v=6Ew6mqwgGR0</a></p> <p><b>Students to complete text book questions pg.119</b></p> |
| <p><b>B2- Wednesday– 5<sup>th</sup> period (Zoom)</b></p>                   | <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>● <b>Identify</b> stages involved in micropropagation.</li><li>● <b>Expain</b> the importance of each stage involved in micropropagation</li><li>● <b>Describe</b> stages involved in producing cloned Dolly</li><li>● <b>Compare</b> plant cloning to animal cloning</li></ul> <p><b>Resources:</b> Boardworks &amp; PowerPoint - Cloning Video link</p> <p><a href="https://www.youtube.com/watch?v=w638PpSwvy0">https://www.youtube.com/watch?v=w638PpSwvy0</a><br/><a href="https://www.youtube.com/watch?v=xuwV3ywCxW8">https://www.youtube.com/watch?v=xuwV3ywCxW8</a></p> <p><b>Students to research on types of growth &amp; growth curves in organisms .</b></p>  |

## YEAR 13 Batch 1 & 2 - BIOLOGY

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

Work sent through Google classroom/G mail/Online Quiz/ZOOM Learning Platform

Topic 10-Ecosystems [10.1,2,3]

L.O-How ecosystem evolve,ecology&effect of abiotic factors on populations

Biology Students Book 2

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| <p><b>B2- Sunday – 0 period (Zoom)</b></p> <p><b>B1- Tuesday –5<sup>th</sup> period (Zoom)</b></p>   | <p><b>Students able to :</b> Define ecological succession. ●<b>Describe</b> the difference between primary and secondary succession. ●Name given the species that are the first to colonize an area during succession. ●Compare primary and secondary succession.● Give an example of how succession can be prevented</p> <p><b>BOARD WORKS –Ecosystems and populations-No [6-12]</b></p> <p><b>Video and PPT-Primary and secondary succession</b></p> <p><a href="http://www.science.co.uk/biology/succession.html">:www.science.co.uk/biology/succession.html</a>,<br/><a href="http://www.internet4classrooms.com">www.internet4classrooms.com</a></p> <p>Search online for ‘volcano ecological succession’ to find some good images illustrating primary succession</p> <p><b>Text Book Page Numbers – 246-249</b></p> <p>Read about a (sometimes controversial) model of the biosphere as a self-regulating system in <i>Gaia: A new look at a life on Earth</i>, a book by James Lovelock on the ‘Gaia hypothesis’.Research and read about succession on Krakatoa</p> |
| <p><b>B1- Thursday – 1<sup>st</sup> and 2<sup>nd</sup> period(Zoom)</b></p> <p><b>B2 - Monday – 8<sup>th</sup> &amp; Thursday 7<sup>th</sup> period (Zoom)</b></p> | <p><b>Students able to-</b></p> <p>●Define abiotic factors, give examples. ●<b>Investigate the effect</b> of biotic factors like temperature soil, wind and water. ●Give one example of how an abiotic factor can affect the abundance of organisms. ●<b>Describe</b> edaphic factor and give three examples ●Why do abiotic factors have a major impact on the distribution of all organisms in a habitat</p> <p><b>BOARD WORKS –Ecosystem and populations—[-3 -19]</b></p> <p><b>Video and PPT:</b> Effect of abiotic factors on populations.</p> <p><a href="http://www.science.co.uk/biology/abiotic%20factors.html">:www.science.co.uk/biology/abiotic factors.html</a>,<br/><a href="http://www.internet4classrooms.com">www.internet4classrooms.com</a></p> <p><b>Text Book Page Numbers – 250 to 251</b></p>  |

## YEAR 13 Batch 1& 2 - BIOLOGY

WEEK 23 (31<sup>st</sup> Jan. – 4<sup>th</sup> Feb.)

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

### Topic 9.1:- Chemical control in plants

L.O - Describe how plants detect light using photoreceptors and how they respond to environmental cues

Biology Students Book 2

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| <p><b>B2 - Sunday –6<sup>th</sup> &amp; 7<sup>th</sup> Period (Zoom)</b></p> <p><b>B1- Monday –1<sup>st</sup> &amp; 2<sup>nd</sup> Period (Zoom)</b></p> | <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>● Predict &amp; explain auxin effect on roots and stem.</li><li>● Describe chemical control in plants brought about by plant growth substances such as auxins, cytokinins and gibberellins.</li><li>● <b>Explain</b> commercial uses of auxin rooting powder, weedkiller, seedless fruit abscission, apical dominance.</li></ul> <p><b>Resources:</b> Board works &amp; PPT – Plant responses &amp; Video link<br/><a href="https://www.youtube.com/watch?v=hGStvgESLJ0">https://www.youtube.com/watch?v=hGStvgESLJ0</a><br/><a href="https://www.youtube.com/watch?v=yW1d3aWYYeM">https://www.youtube.com/watch?v=yW1d3aWYYeM</a></p> <p><b>Students to complete text book questions Pg.186 Q.1-3</b></p> |
| <p><b>B2 - Monday– 3<sup>rd</sup> Period (Zoom)</b></p> <p><b>B1- Tuesday – 4<sup>th</sup> Period (Zoom)</b></p>   | <p><b>Students able to</b></p> <ul style="list-style-type: none"><li>● Identify role of phytochromes in plants .</li><li>● Describe flowering in long day/short day &amp; day neutral plants with examples</li><li>● Explain mechanism of photoperiodism in plants .</li></ul> <p><b>Resources:</b> Board works &amp; PPT –Photoperiodism &amp; Video link</p> <p><b>Students to research on photomorphogenesis –germination &amp; etiolation</b></p>   |