YEAR 9 A-F – BIOLOGY

WEEK 43 (20th June to 24th June)

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

Topics: SB 2h-The Eye

L.O.: Describe the structure and function of the eye as a receptor. Describe how some eye defects change vision and how they can be corrected.

Sunday-Zero period(boys) **Sunday-7th period(girls)**	**Zoom: Describe the structure and function of the eye as a receptor. Explain the differences in structure of the eye from dim to bright light.** https://www.youtube.com/watch?v=YcedXDN6a88 Textbook page : 44-45 **Resources**: Textbook, Video Links & Power point. **Students able to:-** ●**Label** the major parts of a human eye. ●**Describe** the function of the human eye as a receptor. ●**Explain** the differences in structure of the eye from dim to bright light.
Sunday -1st period(boys) **Wednesday-2 nd period (Girls)**	**Zoom: Understand how the eye focuses on objects at different distances and Describe how some eye defects change vision and how they can be corrected.** https://www.youtube.com/watch?v=ob7laNlslzo https://www.youtube.com/watch?v=QYHlHr_S5fg https://www.youtube.com/watch?v=nbwPPcwknPU Textbook page : 44-45 **Resources**: Textbook, Video Links & Power point. **Students able to:-** ●**Define** the term accommodation. ●**Describe** how the eye focuses on objects at different distances .●**Explain** how myopia can be corrected.
Sunday-2nd period(boys) **Wednesday- 3rd period (Girls)**	**GC:** Students write answers to textbook qns on The Eye on Pgs 44-45and turn in their work on GC. **Resources:** Textbook

YEAR 10 A/D/E – BIOLOGY

WEEK 43 (20th June to 24th June)

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

SB-5k-CORE PRACTICAL- ANTIBIOTICS

L.O- Investigate the effects of antiseptics, antibiotics or plant extracts on microbial cultures.

Sunday – 5th Period (Girls)	**ZOOM SESSION** **Students must watch the video link given below on** https://www.youtube.com/watch?v=Cl6EMg0zA-A Read Text book Page- 118-119 Complete question Page 119-Exam style questions **Resources:** PowerPoint /Board work &Video link **Students able to:-** Predict the effect of antiseptics & antibiotics on growth of bacteria. **Devise** an experiment ,collect data & present information. **Analyse** & interpret the data obtained. **Justify** reliability and validity of data collected on scientific principles.

SB5g- PLANT DEFENCES

L.O- Describe how some plants defend themselves against attack from pests and pathogens by physical barriers, including the leaf cuticle and cell wall.
Describe how plants defend themselves against attack from pests and pathogens by producing chemicals, some of which can be used to treat human diseases or relieve symptoms.

Tuesday -1st Period (Girls)	**ZOOM SESSION** **Students must watch the video link given below on** https://www.youtube.com/watch?v=zL8JOw8Qzns Read Text book Page- 108-109 Complete question Page 108-qn 1-3 /109-qn-S1,E1 &Exam style question **Resources:** PowerPoint /Board work &Video link

	Students able to:- Differentiate the terms pest & pathogen. **Describe** the physical barriers in plants to defend themselves from pathogens / pests. Identify the role of poisonous chemicals in young lupin leaves. **Describe** the role of digoxin, quinine& aspirin to cure disease in humans along with their source.**Describe** some chemical defences of plants to pests and pathogens. **Explain** how plant protective chemicals are used to treat human diseases or symptoms.
Tuesday -2nd Period (Girls)	**GOOGLE CLASSROOM** **Students to complete the text book questions Page 112-113 and turn in their work in Google Classroom.**

SB5h- PLANT DISEASES

L.O-Describe different ways plant diseases can be detected and identified, in the lab and in the field including the elimination of possible environmental causes, distribution analysis of affected plants, observation of visible symptoms and diagnostic testing to identify pathogens.

Wednesday-4th period (Girls)	**ZOOM SESSION** **Students must watch the video link given below on** https://www.youtube.com/watch?v=02Mx7s8glig Read Text book Page-110-111 Complete question Page 110- qn 1-2/111- 3,S1 and Exam style question **Resources:** PowerPoint /Board work &Video link **Students able to:-** Enlist the common pathogens of crop plants .Identify **few** symptoms shown by plants when infected by pathogens. State the situations where diagnostic testing is required to identify pathogens.**Describe** how plant diseases are detected using visible symptoms. **Describe** how environmental causes of plant problems are eliminated when identifying disease. **Describe** how distribution analysis can help identify a plant disease. **Explain** how plant pathogens are diagnosed in the lab.

YEAR 10 B/C/F – BIOLOGY

WEEK 43 (20th June to 24th June)

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

SB5k-Antibiotics—Drug Trial Techniques

L.O- Describe the stages of development of new medicines

Sunday – 3rd Period (Boys)	**GOOGLE MEET** **Students must watch the video link given below on** **https://www.youtube.com/watch?v=0iSuyY3a9L0** Read Text book Page- 116-117 Complete question Page 117- qn 5, S1,E1 &Exam style question **Resources:** PowerPoint /Board work &Video link **Students able to:-**List the stages of developing a new medicine, from discovery to prescription. Describe the stages of development of new medicines. Describe two stages of pre-clinical testing in the development of a new antibiotic.

SB5g- PLANT DEFENCES

L.O- Describe how some plants defend themselves against attack from pests and pathogens by physical barriers, including the leaf cuticle and cell wall.
Describe how plants defend themselves against attack from pests and pathogens by producing chemicals, some of which can be used to treat human diseases or relieve symptoms

Monday-4th period (Boys)	**GOOGLE MEET** **Students must watch the video link given below on** **https://www.youtube.com/watch?v=zL8JOw8Qzns** Read Text book Page- 108-109 Complete question Page 108-qn 1-3 /109-qn-S1,E1 &Exam style question **Resources:** PowerPoint /Board work &Video link

	Students able to:- Differentiate the terms pest & pathogen. **Describe** the physical barriers in plants to defend themselves from pathogens / pests. Identify the role of poisonous chemicals in young lupin leaves. **Describe** the role of digoxin, quinine& aspirin to cure disease in humans along with their source.**Describe** some chemical defences of plants to pests and pathogens. **Explain** how plant protective chemicals are used to treat human diseases or symptoms.

SB5h- PLANT DISEASES

L.O-Describe different ways plant diseases can be detected and identified, in the lab and in the field including the elimination of possible environmental causes, distribution analysis of affected plants, observation of visible symptoms and diagnostic testing to identify pathogens.

Thursday-1st Period(Boys)	**GOOGLE MEET** **Students must watch the video link given below on** **https://www.youtube.com/watch?v=02Mx7s8glig** Read Text book Page-110-111 Complete question Page 110- qn 1-2/111- 3,S1 and Exam style question **Resources:** PowerPoint /Board work &Video link **Students able to:**-Enlist the common pathogens of crop plants .Identify **few** symptoms shown by plants when infected by pathogens. State the situations where diagnostic testing is required to identify pathogens.**Describe** how plant diseases are detected using visible symptoms. **Describe** how environmental causes of plant problems are eliminated when identifying disease. **Describe** how distribution analysis can help identify a plant disease. **Explain** how plant pathogens are diagnosed in the lab.

Thursday-2nd Period (Boys)	**GOOGLE CLASSROOM** **Students to complete the text book questions Page 112-113 and turn in their work in Google Classroom.**

YEAR 11 A - F BIOLOGY (GCSE)

WEEK43 - (20th June to 24th June)

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

Topic-SB8d-The Heart

L.O-Investigation of pulse rate, BP and oxygen content in blood using BP monitor and pulse oximeter.

Sunday-6th period(girls) & 8th period(boys)	**Asynchronous-SB9h-Preserving biodiversity.** Completion of work sheet-Reforestation in UK.
Monday -3rd period(girls) **Tuesday -5th period (boys)**	**Asynchronous lesson** **SB3a-Sexual and asexual reproduction.** **Research-**New observations can change long held scientific ideas. Why have the Komodo dragon hatchlings and wild-born parthenogenic pit vipers forced scientists to rethink their ideas about asexual reproduction in vertebrates.
Tuesday-7th & 8th period(girls) **Thursday-5th & 6th period(boys)**	**Zoom session** Investigation of pulse rate, BP and oxygen content in blood using BP monitor and pulse oximeter. https://www.youtube.com/watch?v=8wqgAK-ug2o https://www.youtube.com/watch?v=8ceP-iVHEPA https://www.youtube.com/watch?v=2-UyprWcGEc Students able to ●Plan an experiment to investigate pulse rate, BP and oxygen content in blood using BP monitor and pulse oximeter. ●Predict how variation in pulse rate ,BP & oxygen content in blood affect the health .●Analyze & interpret the results obtained .●Identify the significance of maintaining B.P, pulse rate and oxygen content in blood at the safe level.

YEAR 11 G & H – BIOLOGY (IGCSE)

WEEK 43 (20th June to 24th June)

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

Ecosystem: Human Influence on the Environment and Conservation of Biodiversity

L.O.: **To describe the impact of consumer products on the environment. To describe different methods of conservation of biodiversity.**.

Sunday- 4th period	**Asyn GC: Asynchronous- - TURTLE CONSERVATION** **Resources**: Worksheet Students complete the WS on TURTLE CONSERVATION and turn in their work on GC.
Monday- 7th period	**Asyn GC: Asynchronous- -Conservation of Biodiversity** https://www.youtube.com/watch?v=JrpVXR2ZOQw **Resources**: Links and web Students research about ex situ and in situ conservation and examples of each and turn in their work on GC.
Tuesday – 3rd and 4th period	**Zoom: To explain the effect of products on the environment.** https://www.youtube.com/watch?v=rH8DTc7Mqog **Resources**: Video Links Students look at the environmental impact of a product during it's life cycle. **Students able to:** ●**Define** sustainability .●**Explain** the human impacts of manufacturing products on the environment. ●**Describe** how the problem of environmental impacts due to consumer products can be solved. .

YEAR 12 - Batch 1 - BIOLOGY

WEEK 43 - 20th June to 24th June

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

Topic 3 . 3 - Biodiversity

L.O – Discuss ethical, economical, aesthetic & ecological reasons for conservation. Explain principles of in situ & ex situ conservation. Significance of IUCN list & Sustainability linked to conservation of Biodiversity.

Topic 2 – Core Practical 2- Study of cells & Drawing of Plan diagrams .

L.O - Understand calliberation of eye piece graticule using stage micrometer and drawing of plan diagrams

Biology Students Book 1

B1-Tuesday – 4th period(Zoom)	**Students able to** ●**Identify** ethical, economical, aesthetic & ecological reasons for conservation. ● Role of IUCN list of endangered species ● Sustainability linked to conservation of Biodiversity **Resources:** AS Board works-Conservation & Video link https://www.youtube.com/watch?v=BCH1Gre3Mg0 https://www.youtube.com/watch?v=oqNROoKmPLU **Students to complete text book questions** Students book 1 Textbook Questions – Page 203
B1-Thursday – 1 st & 2nd period(Zoom)	**Students able to** ●Differentiate eye piece graticule & stage micrometer ● Describe caliberation of eye piece graticule using stage micrometer ● Calculate size of cells under microscope using eye piece graticule &stage micrometer ●Draw and label plan diagrams of sections of leaf, root & stem under a microscope **Resources:** Video link https://www.youtube.com/watch?v=HXTqaUTGrKg https://www.youtube.com/watch?v=tv9GX0RZeBE https://www.youtube.com/watch?v=VAMkmzdTCOY **Students to complete worksheet on A level Biology Mathematics skills put in GC**

YEAR 12 - Batch 2 - BIOLOGY

WEEK 43 - 20th June to 24th June

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

Topic 2 – Core Practical 2- Study of cells & Drawing of Plan diagrams .

L.O - Understand calliberation of eye piece graticule using stage micrometer and drawing of plan diagrams

B2-Monday – 5th & 8 th period(Zoom)	**Students able to** ●Differentiate eye piece graticule & stage micrometer ● Describe caliberation of eye piece graticule using stage micrometer ● Calculate size of cells under microscope using eye piece graticule &stage micrometer ●Draw and label plan diagrams of sections of leaf, root & stem under a microscope **Resources:** Video link https://www.youtube.com/watch?v=HXTqaUTGrKg https://www.youtube.com/watch?v=tv9GX0RZeBE https://www.youtube.com/watch?v=VAMkmzdTCOY **Students to complete worksheet on A level Biology Mathematics skills put in GC**

YEAR 12 B1 &B2- BIOLOGY

WEEK 43 - 20th June to 24th June

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

Topic - Statistics and revision of core practical based qns

L.O – Explain, analyse ,evaluate .interpret statistics and revision of core practical based qns

Biology Students Book 1 & 2

B1- Sunday – 8th period [GC] **B2- Tuesday – 3rd period [GC]**	**GC-Asynchronous learning** **Practical oriented questions-. Answer the questions given** and task to be turned in Google classroom

B1 - Monday – 1st & 2nd period (Zoom) **B2- 5th & 6th period (Zoom**	**Revise and discuss the work sheets given based on statistical tests.** **Students able to** ●Define standard deviation and error bar ●Interpret and analyse the t test ,correlation and chi square test ●**Differentiate** between t test ,correlation and chi square test **BOARD WORKS –AS board works** **Video and PPT:** Statistical tests in biology

YEAR 13 B1 & B2- BIOLOGY

WEEK 43 - 20th June to 24th June

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

L.O –Revise and recall the concepts related to Male pregnancy in animals

B2- Sunday – 0 period (Zoom) **B1- Tuesday – 5th period (Zoom)**	**Revise and analyse the answers of Asynchronous learning- Class work -Male pregnancy in animals – analyse and evaluate the advantages and disadvantages**
B2 - Monday – 8th period (GC) **B1-Thursday – 1 st & 2nd period (GC)**	**Asynchronous learning - Research work** **Fashion industry and animal abuse-analyse and evaluate the advantages and disadvantages and task to be turned in Google classroom**

YEAR 13 Batch 1& 2 - BIOLOGY

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

WEEK 43 - 20th June to 24th June

Topic 3:- Biodiversity & Topic 8: Selection Pressure &Gene Pool

L.O – To recall concepts on types of natural selection , Genetic drift , Species diversity & Conservation

Biology Students Book 1 & 2

B2 - Sunday –6th & 7 th Period (Zoom) **B1- Monday –1st & 2nd Period (Zoom)**	**Students to answer mcq questions** on types of Natural selection , Genetic drift , Species diversity and conservation in groups allotted followed by discussion **Students able to** ●Recall types of natural selection with examples ●Significance of Genetic drift ● Species diversity brought about by isolation mechanisms ●Principles & strategies linked to conservation of organisms **Resources:** Video link https://www.youtube.com/watch?v=XNN-ag_28pk https://www.youtube.com/watch?v=wWylCPXPLMU
B2 - Monday– 3rd Period (GC) **B1- Tuesday – 4 th Period (GC)**	**Research on Selection pressure of disease** and complete questions 1- 4 pg.171 related to think Bigger activity **Are Humans Still Evolving?** given on pg.170 book 2 and task to be turned in Google classroom .