YEAR 9 A-F – BIOLOGY

WEEK 41 (6th June to 10th June)

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

Topics: SB 2e-The brain SB 2f- The brain and spinal cord problems

L.O.: Describe the structures and functions of the brain including the cerebellum, cerebral hemispheres and medulla oblongata. Describe various imaging techniques to identify and treat brain and spinal cord problems

Sunday-Zero period(boys) **Sunday-7th period(girls)**	**Zoom: Describe the structures and functions of the brain including the cerebellum, cerebral hemispheres and medulla oblongata.** https://www.youtube.com/watch?v=eOoPAcvkKQk https://www.youtube.com/watch?v=fIpo7xGF8FQ Textbook page : 38-39 **Resources**: Textbook, Video Links & Power point. **Students able to:-** ●**Label** different parts of the brain (cerebellum, cerebral hemispheres, medulla oblongata).●**Describe** the functions of different parts of the brain (cerebellum, cerebral hemispheres, medulla oblongata)●**Explain** how the role of the cerebral cortex in controlling personality through Gage's incident was concluded.
Sunday -1st period(boys) **Wednesday-2 nd period (Girls)**	**Zoom: Describe various imaging techniques and treatments for brain and spinal cord problems.** https://www.youtube.com/watch?v=Fuv76dJKBkE&t=16s https://www.youtube.com/watch?v=zxpb1-okVig Textbook page : 40-41 **Resources**: Textbook, Video Links & Power point. **Students able to:-** ●**State** the advantage of PET and CT scans. ●**Describe** the PET scan technique. ●**Explain** why chemotherapy is used to kill cancer cells.●**Evaluate** the limitations in treating damage and disease in the brain and other parts of the nervous system, including spinal injuries and brain tumours.
Sunday-2nd period(boys) **Wednesday- 3rd period (Girls)**	**GC:** Students write answers to textbook qns on The brain on Pgs 38-39 and turn in their work on GC. **Resources:** Textbook

YEAR 10 A-F – BIOLOGY

WEEK 41 (6th June to 10th June)
Work sent to students through Class Bio Whats App Group/G mail/Google Classroom

SB-5d-Pathogens-AIDS-(Communicable/Infectious Disease)

L.O- Explain how pathogens are spread and how this spread can be reduced or prevented, including AIDS(HIV)-virus

Sunday – 3rd Period (Boys) **Sunday – 5th Period (Girls)**	**ZOOM SESSION/GOOGLE MEET** **Students must watch the video link given below on** https://www.youtube.com/watch?v=K5zFxfbmC1M Read Text book Page- 102-103 Complete question Page -103-qn 6,S1 &Exam Style question **Resources:** PowerPoint /Board work &Video link **Students able to:-** Define term vectors for diseases.Define Communicable Disease. Identify mode of transmission for certain diseases especially HIV. **Explain** how signs of a disease can be used to identify the pathogen. What are HIV and AIDS. How does HIV replicate. **Describe** the causes, means of transmission and effects of HIV infection .

SB-5e-Spreading Pathogen- Malaria& TB-(Communicable/Infectious Disease)

L.O- Explain how pathogens are spread and how this spread can be reduced or prevented, including malaria (protists) – animal vectors, tuberculosis (bacteria) – airborne

Monday-4th period (Boys) **Tuesday -1st Period (Girls)**	**ZOOM SESSION/GOOGLE MEET** **Students must watch the video link given below on** https://www.youtube.com/watch?v=aGWP3Xbk0OY https://www.youtube.com/watch?v=nAqTKctKV8c https://www.youtube.com/watch?v=SP4mghvN3nM

	Read Text book Page- 104-105 Complete question Page 105-1,3,6,E1 &S1 **Resources:** PowerPoint /Board work &Video link **Students able to:-** ● Identify the mode of transmission of malaria &TB.**Explain** how the spread of the Malaria & TB can be prevented. Role of mosquitoes in the spread of malaria. Describe the lifecycle of a malarial parasite . **Describe** the symptoms, causes, control measures ,and distribution of Malaria & TB. How is tuberculosis infection caused?

SB5f- Virus life cycles

L.O- Describe the lifecycle of a virus, including lysogenic and lytic pathways

Thursday-1st Period(Boys) **Wednesday-4th period (Girls)**	**ZOOM SESSION/GOOGLE MEET** **Students must watch the video link given below on** https://www.youtube.com/watch?v=HZgMHlZUXD8 https://www.youtube.com/watch?v=Qulwy6ow-Wc Read Text book Page- 106-107 Complete question Page 106- 1,2,4/Page 107- 6,S1 &Exam Style Question **Resources:** PowerPoint /Board work &Video link **Students able to:-** Draw and label the structure of a virus.**Describe** the lysogenic pathway of a virus life cycle. **Compare** and contrast the lytic and lysogenic pathways. Calculate the cross-sectional area of viral cultures and clear agar jelly.
Thursday-2nd Period (Boys) **Tuesday -2nd Period (Girls)**	**GOOGLE CLASSROOM** **Students to complete the Text book questions Page 104-105 and turn in the work in GC**

YEAR 11 A - _F BIOLOGY (GCSE)

WEEK 41 (6th June to 10th June)
Work sent to students through Class Bio Whats App Group/G mail/Google Classroom

Topics SB9m-Rates of decomposition.SB9h-Preserving biodiversity

L.O- Explain the effects of temperature, water content and oxygen availability on the rate of decomposition in food preservation.Explain the benefits of maintaining local and global biodiversity, including the conservation of animal species and the impact of reforestation.

Sunday-6th period(girls) & 8th period(boys)	**Zoom session-SB9m-Rates of decomposition.** **Text book pages 202 -203** Resources: Board works & Video link **https://www.youtube.com/watch?v=bnGaOFataws** **https://www.youtube.com/watch?v=6utMftGxuaI** **Students able to** ●**Identify few** methods of preserving food ●**Identify few** factors affecting decomposition ●Describe how various factors affect compost forming and how each technique is involved in preserving food ●**Calculate** the rate of decomposition of food products ●**Analyse** the data obtained for decomposition of food substances
Monday -3rd period(girls) Tuesday -5th period (boys)	**Zoom session –SB9h-Preserving biodiversity** **Text book pages-192 to 193 -Discussion of text book questions.** Resources: Board works & Video link**https://www.youtube.com/watch?v=bs9e6ovISbs** **https://www.youtube.com/watch?v=iTy6O7YtnP4** **https://www.youtube.com/watch?v=SROoINlp4VY**

	Students able to ●**Identify ways** by which animal species be conserved. ●Describe how organisms are conserved using captive breeding programme . ●Expalin how does conservation act protect biodiversity and how reforestation affect biodiversity
Tuesday-7th & 8th period(girls) **Thursday-5th&6th period(boys)**	**Asynchronous lesson** **SB6c-Absorbing water and mineral ions.** **Research** -The bark of young trees contains a ring of vascular bundles. Forestry workers and gardners protect young trees with plastic tubes around the lower part of their trunk. Why do you think they are being protected from and why is this necessary?
Wednesday--6th period (boys) & 7th period (girls)	Asynchronous- **SB9l- The nitrogen cycle** Completion of worksheet – **Choosing the best method.**

YEAR 11 G & H – BIOLOGY (IGCSE)

WEEK 41 (6th June to 10th June)
Work sent to students through Class Bio WhatsApp Group/G mail/Google Classroom

BIOTECHNOLOGY: Antibiotics

L.O.: **To describe the production and the effectiveness of different types of vaccines.**

Sunday- 4th period	**Asyn GC: Asynchronous- -Antibiotics** **Research on stages in the normal drug development process.** https://www.youtube.com/watch?v=w3ykU52K-Hw&t=11s https://www.youtube.com/watch?v=_hjBfbMuvPA **Resources**: Video Links Students create an infographic on the drug development process.
Monday- 7th period	**Asyn GC: Asynchronous- -Drug resistance** **Development of Drug resistance and its challenges.** Students research on the causes and challenges of drug resistance and prepare a presentation to inform the general public about the threat of antibiotic resistance and ways to prevent it. **Resources**: Video Links & research articles https://www.youtube.com/watch?v=5VNIL3gbqfI https://www.youtube.com/watch?v=L8XYxNqEJqI https://science.sciencemag.org/content/364/6435/eaau4679
Tuesday – 3rd and 4th period	**Zoom: Investigate the effect of antibiotics on bacterial growth.** https://www.youtube.com/watch?v=BkbLI2mAMP8 https://www.youtube.com/watch?v=sx1uDYSfINA&t=2s **Resources**: Video Links & practical sheet Students able to: **Identify** the risks and hazards during the investigation. **Calculate** the area of the zone of inhibition **Draw** conclusion from the observations.
Wednesday – 5th period	**Asyn GC:** Students complete the practical sheet and turn in the practical on GC.

YEAR 12 - Batch 1 - BIOLOGY

WEEK 41 (6th June to 10th June)
Work sent to students through Class Bio Whats App Group /Google Classroom

Topic 3.1 - 4 New evidence for evolution

L.O – Role of DNA sequencing ,scientific journals ,peer reviewing & scientific conferences in support of theory of evolution

Topic 3. 2 .Natural Selection

L.O – To discuss concepts on types of Natural selection with examples .

Biology Students Book 1

B1-Tuesday – 4th period(Zoom)	**Students able to** ●**Recall** DNA Sequencing **in determining evolutionary relationship** ●Significance of scientific journals ,peer reviewing & scientific conferences in support of theory of evolution. ●Compare new evidence of evolution to old evidences of evolution **Resources:** Boardworks & PowerPoint - Study of Genome & Video link https://www.youtube.com/watch?v=ZzUQVedsdDk https://www.youtube.com/watch?v=7lf3Q5BlNWo https://www.youtube.com/watch?v=m8gaq7ei7zc **Students to complete text book questions – Page 161**
B1-Thursday – 1 st & 2nd period(Zoom)	**Students able to** ● Predict factors contributing to evolution – overproduction, competition ,survival of fittest, adaptation & inheritance of the change. ● Differentiate between natural selection from sexual selection Eg. tail length of African widow birds ● Explain, how environmental factors can act as stabilizing or evolutionary forces of natural selection.eg. warfarin resistance in rats, peppered moth& Darwin's finches. **Resources:** A2 Board works-Natural selection & Video link https://www.youtube.com/watch?v=1zx0U_yUFnw https://www.youtube.com/watch?v=xQ55DG6Xye8 **Students to complete text book questions** Pg.180 q.1-3

YEAR 12 - Batch 2 - BIOLOGY

WEEK 41 (6th June to 10th June)
Work sent to students through Class Bio Whats App Group /Google Classroom

Topic 3. 2 -1 – Evolution and Adaptation

L.O – Discuss Darwinism & Neodarwinism. Describe Anatomical ,Physiological & Behavioural Adaptations linked to natural selection .

Topic 3. 2 .Natural Selection

L.O – To discuss concepts on types of Natural selection with examples .

Biology Students Book 1

B2-Monday – 5th period(Zoom) **B2- Monday –8 th period(Zoom)**	**Students able to** ● **Differentiate** Darwinism & Neodarwinism. ● Identify & explain Anatomical ,Physiological & Behavioural Adaptations of organisms linked to survival of fittest **Resources:** Boardworks & PowerPoint - Evolution & Video link https://www.youtube.com/watch?v=JOk_0mUT_JU https://www.youtube.com/watch?v=cC8k2Sb1oQ8 https://www.youtube.com/watch?v=vnmPdHmRv9o **Students to complete text book questions - Page 177**
B2- Wednesday – 5th period(Zoom)	**Students able to** ● Predict factors contributing to evolution – overproduction, competition ,survival of fittest, adaptation & inheritance of the change. ● Differentiate between natural selection from sexual selection Eg. tail length of African widow birds ● Explain, how environmental factors can act as stabilizing or evolutionary forces of natural selection.eg. warfarin resistance in rats, peppered moth& Darwin's finches. **Resources:** A2 Board works-Natural selection & Video link https://www.youtube.com/watch?v=1zx0U_yUFnw https://www.youtube.com/watch?v=xQ55DG6Xye8 **Students to complete text book questions** Pg.180 q.1-3

YEAR 12 B1 & B2- BIOLOGY

WEEK 41 (6th June to 10th June)

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

B1- Sunday – 8th period[GC] **B2- Tuesday – 3rd period [GC]**	**GC-Asynchronous learning** **Practical oriented questions-. Answer the questions given on** and task to be turned in Google classroom
B1 - Monday – 1st & 2nd period (Zoom) **B2- Thursday – 5th and 6th period(Zoom)**	**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 41 (6th June to 10th June)

Work sent through Google classroom/G mail/Online Quiz/ZOOM Learning Platform
L.O –Revise and recall the concepts related to Antibiotics–case study

B1- Tuesday – 5 th period (GC) **B2- Sunday – 0 period (GC)**	**Asynchronous learning-Class work** **Case study-Anti-adhesive antibiotics ,analyse and evaluate the advantages and disadvantages based on the case study given and task to be turned in Google classroom** **Resources:** Case study and worksheets based on Antibiotics **Students able to analyse and evaluate the concepts on antibiotics**
B1- Thursday – 1st and 2nd period(GC) **B2 - Monday – 8th & Thursday 7th period (GC)**	**Asynchronous learning-Research work** **Electricity from waste products-analyse and evaluate the advantages and disadvantages** **and task to be turned in Google classroom**

YEAR 13 Batch 1& 2 - BIOLOGY

WEEK 41 (6th June to 10th June)

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

Topic 9.3 – 4:- Thermoregulation

L.O –.Describe the parts & functions of various parts of the human skin. Explain negative & positive feedback mechanism involved in thermoregulation

Biology Students Book 2

B2 - Sunday –6th & 7 th Period (Zoom) **B1- Monday –1st & 2nd Period (Zoom)**	**Students presenting ppt on Skin structure & Functions in groups allotted** **Students able to** ● Draw and label various parts of human skin involved in thermoregulation ● Explain the negative feedback mechanism involved in thermoregulation ● Compare positive feedback mechanism to negative feedback mechanism involved in thermoregulation **Resources:** Board works & PPT – Structure of human skin & Video link https://www.youtube.com/watch?v=xUW3E6eDbzU https://www.youtube.com/watch?v=baiph3s6M7c https://www.youtube.com/watch?v=zcdGJDGXxgs **Students to complete questions pg.237**
B2 - Monday– 3rd Period (GC) **B1- Tuesday – 4 th Period (GC)**	**Thinking Bigger Activity – The Cold Killer – Pg 240 – Students book 2** **Students to read the extract given and answer the qn 1-5 pg.241 and turn in the document as pdf in GC**