## YEAR 12 - Batch 1 & 2 - BIOLOGY

# WEEK 7 (11<sup>th</sup> Oct - 15<sup>th</sup> Oct)

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

#### **Topic 2.1–Eukaryotes**

**L.O** – Describe the structure of Golgi Apparatus, Compare role of Lysosomes & Peroxisomes & discuss protein transport within cells. Role of vacuoles in animals & plants .Explain Ultra structure of Cell wall & Chloroplast in plant cells

#### Biology Students Book 1

<b>B1-</b> Tuesday $-4^{th}$	Students able to
period(Zoom)	•Compare structure & functions of ER & Golgi apparatus .
B2 – Monday – 5 <sup>th</sup> period(Zoom)	•Differentiate primary lysosomes, secondary lysosomes & residual bodies
	• Identify the role of vacuoles in animals & plant cells
	•Explain transport of protein within cells
	Resources: PowerPoint & Video link
	https://www.youtube.com/watch?v=yI5x3yI3frU
	https://www.youtube.com/watch?v=whbJXQpswic
	https://www.youtube.com/watch?v=nJMwvDMwgLE
	https://www.youtube.com/watch?v=too8lwzJdT8
	Students to complete Text book questions pg. 82
B1 - Thursday – 1 <sup>st</sup>	Students to complete Text book questions pg. 82         Students able to
B1 - Thursday – 1 <sup>st</sup> period(Zoom)	Students to complete Text book questions pg. 82         Students able to         •Identify chemical components that make up the cell wall.
B1 - Thursday – 1 <sup>st</sup> period(Zoom)	Students to complete Text book questions pg. 82         Students able to         •Identify chemical components that make up the cell wall.         •Differentiate Primary & Secondary cell wall .
B1 - Thursday – 1 <sup>st</sup> period(Zoom) B2 - Monday – 8 <sup>th</sup> period(Zoom)	Students to complete Text book questions pg. 82         Students able to         •Identify chemical components that make up the cell wall.         •Differentiate Primary & Secondary cell wall .         •Significance of Plasmodesmata in plant cells .
B1 - Thursday – 1 <sup>st</sup> period(Zoom) B2 - Monday – 8 <sup>th</sup> period(Zoom)	Students to complete Text book questions pg. 82         Students able to         •Identify chemical components that make up the cell wall.         •Differentiate Primary & Secondary cell wall .         •Significance of Plasmodesmata in plant cells .         • Describe the role of vacuoles in animals & plant cells
B1 - Thursday – 1 <sup>st</sup> period(Zoom) B2 - Monday – 8 <sup>th</sup> period(Zoom)	Students to complete Text book questions pg. 82Students able to•Identify chemical components that make up the cell wall.•Differentiate Primary & Secondary cell wall .•Significance of Plasmodesmata in plant cells .• Describe the role of vacuoles in animals & plant cellsResources: PowerPoint & Video link
B1 - Thursday – 1 <sup>st</sup> period(Zoom) B2 - Monday – 8 <sup>th</sup> period(Zoom)	Students to complete Text book questions pg. 82Students able to•Identify chemical components that make up the cell wall.•Differentiate Primary & Secondary cell wall .•Significance of Plasmodesmata in plant cells .• Describe the role of vacuoles in animals & plant cellsResources: PowerPoint & Video linkhttps://www.youtube.com/watch?v=yjrLbuzU70k
B1 - Thursday – 1 <sup>st</sup> period(Zoom) B2 - Monday – 8 <sup>th</sup> period(Zoom)	Students to complete Text book questions pg. 82         Students able to         • Identify chemical components that make up the cell wall.         • Differentiate Primary & Secondary cell wall .         • Significance of Plasmodesmata in plant cells .         • Describe the role of vacuoles in animals & plant cells         Resources: PowerPoint & Video link         https://www.youtube.com/watch?v=yjrLbuzU70k         https://www.youtube.com/watch?v=too8lwzJdT8
B1 - Thursday – 1 <sup>st</sup> period(Zoom) B2 - Monday – 8 <sup>th</sup> period(Zoom)	Students to complete Text book questions pg. 82         Students able to         •Identify chemical components that make up the cell wall.         •Differentiate Primary & Secondary cell wall .         •Significance of Plasmodesmata in plant cells .         • Describe the role of vacuoles in animals & plant cells         Resources: PowerPoint & Video link         https://www.youtube.com/watch?v=yjrLbuzU70k         https://www.youtube.com/watch?v=too8lwzJdT8

B1 - Thursday– 2 <sup>nd</sup>	Students able to	
period(Zoom)	• Draw & label various parts of chloroplast	
d.	• Describe the role of various parts of chloroplast	
B2 - Wednesday – 5 <sup>th</sup> period (Zoom)	• Compare types of plastids in plants – amyloplast, chloroplast & chromoplast	
	<b>Resources:</b> PowerPoint & Video link	
	https://www.youtube.com/watch?v=eOPEn2qYff4	
	https://www.youtube.com/watch?v=9SPP7pJ_hX4	
	Students to complete Text book questions pg. 87	
YEAR 12 - Batch 1 & 2 - BIOLOGY		

### WEEK 7 (11<sup>th</sup> Oct - 15<sup>th</sup> Oct)

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

#### Topic 1-Biological molecules 2 [DNA and protein synthesis]

L.O - Understand gene as a sequence of bases on a DNA molecule coding for a sequence of amino acids in a polypeptide chain, genetic code. Analyse the processes of transcription in the nucleus and translation at the ribosome, including the role of sense and antisense DNA, mRNA, t RNA and the ribosomes

**Biology Students Book 1** 

B1- Sunday – 8th period (GC)	
B2- Tuesday – 3rd period (GC)	GC-Asynchronous learning Exam style questions-1.3 text book. Answer the questions given on page 52 & 53 and task to be turned in Google classroom
B1 - Monday – 1st & 2nd period (Zoom) B2- Thursday – 5th and 6th period(Zoom)	<ul> <li>Students able to- Explain why genetic code is described as universal.</li> <li>Describe with the aid of diagrams, how the sequence of nucleotides within a gene is used to construct a polypeptide, including the roles of messenger RNA, transfer RNA and ribosomes.</li> <li>Explain amino acid activation and translation.</li> <li>Video and PPT: Steps of protein synthesis</li> </ul>

Websites: <u>www.science.co.uk/biology/proteinsynthesis.html</u> , <u>www.internet4classrooms.com</u>
• Homework, practice and support: Mastering <i>Nucleic Acids – Transcription and translation</i>
• Homework, practice and support: Mastering <i>Nucleic</i> <i>Acids – Compare and contrast DNA replication and</i> <i>transcription</i>
• There is an excellent animation at www.nationalstemcentre.org.uk (search for 'from DNA to protein').
BOARD WORKS- Protein synthesis-No -4 -10
Worksheet – Nucleic Acids and Protein Synthesis Text Book Page Numbers – 44-49