

**BIOLOGY Edexcel (B)****TERM 1 TOPIC LIST**

<b>Topic 1</b>	<b>Biological molecules</b>
1.1	Carbohydrates
1.2	Lipids/triglycerides and role in membranes
1.3	proteins
1.4	DNA and protein synthesis genes: function, structure (triplet code), bonding, mutations, Sickle cell anaemic (related to genes/mutations)
1.5	enzymes: structure and function
1.6	Inorganic ions and roles in plants
1.7	water - bonding and structure
<b>Topic 2</b>	<b>Cells, viruses and reproduction</b>
2.1	cell structure and ultrastructure (eukaryotic) cells, tissues and organs organisation cell structure and ultrastructure (prokaryotic) Staining specimens
2.2	viruses: classification, lytic cycle, treatment and drug use ethics
2.3	cell division: mitosis and meiosis
2.4-2.5	sexual and asexual reproduction process of fertilisation gamete formation: oogenesis and spermatogenesis

**TERM 2 TOPIC LIST**

<b>Topic 3</b>	<b>Classification and biodiversity</b>
3.1	classification of species
3.2	natural selection and evolution DNA sequencing, bioinformatics and gel electrophoresis in distinguishing between species niche and adaptations pathogens and evolutionary race
3.3	Biodiversity conservation of endangered species
<b>Topic 4</b>	<b>Exchange and transport</b>
4.1	surface area to volume ratio
4.2	cell transport mechanisms passive/ active transport; ATP
4.3	gas exchange
4.4	Circulation Heart, blood vessels: structure & function structure and function of Hb and myoglobin cardiac cycle blood and contents blood clotting process atherosclerosis
4.5	transport of gases in the blood
4.6	transport of materials between circulatory system and cells
4.7	transport in plants