GES IGCSE BIOLOGY Term 1 (Sept-Oct, 2019-20)

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| TOPICS: Plant and human transport systems |

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| Theme: The movement of water from soil to air in xylem, and of organic products of photosynthesis in phloem, is considered.the transport system is involved in the carriage of gases between the gaseous exchange surface and the body tissues, and so coverage of this leads on naturally from a consideration of gas exchange. | Level: IG2 |
| Objectives: Its aim is to set out a progression through the 2016 syllabus content which is divided into ten teaching units, but the order in which topics are covered has been adjusted to give a coherent flow to the course. | |

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| Focussing Questions | Key Words | |
| 1.Transport in plants   * What are the functions of xylem and phloem?   2.Water uptake   * What is the function of root hair cells and how can they be observed using a microscope?   3.Transpiration   * How is water transported from the roots to leaves through the xylem vessels?   4.Translocation .   * What is translocation?  |  | | --- | | 5. Transport in animals |  * How does the circulatory system as a system of blood vessels with a pump and valves ensure one-way flow of blood?   6. Heart   * What are the structures of the mammalian heart and what are their functions?   7.Blood and lymphatic vessels   * What are the structure and functions of arteries, veins and capillaries? How are the structures adapted for their functions?   8. Blood   * What are the components of blood?   9. Respiration   * What is energy used for in the human body?   Assessment: Class activities, class tests, Termly test/exam | Xylem  Phloem  Root hair cell  Translocation  Heart  Artery  Vein  Capillary  Vena cava  Lymph  Red blood cell  Lymphocyte  Phagocyte | Explaining words:  To demonstrate the qualities of…  …these can help to clarify…  As a result…  These body parts are associated with…  These can be used to differentiate…  …because…  This causes… |

**Textbook and worksheets**