



ST. MARY'S *Catholic High School, Dubai*

PORTIONS FOR FIRST TERM EXAM - JAN, 2019

YEAR 11

YR. 11 - BIOLOGY

Paper 1

Topic 1 – Key Biological Concepts

1. Microscopes
2. Plant & animal cells
3. Using Microscopes
4. Specialized cells
5. Inside bacteria
6. Enzymes & Nutrition
7. Testing foods
8. Enzyme action
9. Enzyme activity
10. pH & enzymes
11. Transporting substances
12. Osmosis in potato slices

Topic 2 – Cells and Control

1. Mitosis
2. Growth in animals
3. Growth in plants
4. Stem cells
5. The brain

6. Brain& spinal cord problems
7. The nervous system
8. The eye
9. Neurotransmissions speeds

Topic 3– Genetics

1. Sexual and asexual reproduction
2. Meiosis
3. DNA
4. DNA extraction
5. Protein synthesis
6. Genetic variants & phenotypes
7. Mendel
8. Alleles
9. Inheritance
10. Multiple and missing alleles
11. Gene mutations
12. Variation

Topic 4– Natural selection and Genetic modification

1. Evidence for human evolution
2. Darwins theory
3. Development of Darwins theory
4. Classification
5. Breeds and varieties
6. Tissue Culture
7. Genes in agriculture and medicine

8. Fertilisers and biological control

Paper 2

Topic 1 – Key Biological Concepts

1. Microscopes
2. Plant & animal cells
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4. Specialized cells
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Topic 5 – Health, Disease and the Development of medicines

1. Health and Disease
2. Non-communicable diseases
3. Cardiovascular diseases
4. Pathogens
5. Spreading pathogens
6. Virus life cycles
7. Plant defences
8. Plant diseases

9. Physical and chemical barriers
10. The immune system
11. Antibiotics
12. Monoclonal antibodies

Topic 6 – Plant Structures and their functions

1. Photosynthesis
2. Factors that affect photosynthesis
3. Photosynthesis & light intensity
4. Absorbing water & mineral ions
5. Transpiration & translocation
6. Plant adaptations
7. Plant hormones
8. Uses of plant hormones

Topic 7– Animal Coordination ,Control and Homeostasis

1. Hormones
2. Hormonal control of metabolic rate
3. The menstrual cycle
4. Hormones & the menstrual cycle
5. Control of blood glucose
6. Type 2 diabetes
7. Thermoregulation
8. Osmoregulation
9. The kidneys

