

# EMS Doha Secondary Mock Revision Guide '24-25

**Year: 11**

**SUBJECT: IGCSE Biology**

**TEACHER(S): Ms Lubna, Ms Hanadi and Ms Nidhli.**

REVISION INFORMATION	
Topics/Chapters	Details
Unit 1 Characteristics and classification of living organisms.	Characteristics of living organisms, concept and uses of classification systems and features of organisms.
Unit 2 Organisation of the organism	Cell structure and size of the specimen.
Unit 3 Movement into and out of cells	Diffusion, osmosis and active transport.
Unit 4 Biological Molecules	Structure of carbohydrates, proteins, fats and their roles in living organisms. The importance of water in living organisms. Identification of biological molecules.
Unit 5 Enzymes	Enzymes as catalyst, enzyme specificity and factors that affect enzyme controlled reaction.
Unit 6 Plant nutrition	Photosynthesis and leaf structure.
Unit 7 Human Nutrition	Diet, digestive system, physical & chemical digestion and absorption.
Unit 8 Transport in plants	Xylem and phloem, water uptake, transpiration and translocation.
Unit 9 Transport in animals	Circulatory systems, heart, blood vessels and blood.
Unit 10 Diseases & Immunity	Pathogens and diseases, defense against pathogens, active and passive immunity. Vaccination and effect of cholera toxin.
Unit 11 Gas exchange in humans	The human breathing system, effect of exercise on rate & depth of breathing. Protecting the breathing system.
Unit 12 Respiration	Respiration, aerobic and anaerobic respiration.
Unit 13 Excretion in humans	The excretory organs, the liver and kidney.
Unit 14 Coordination and Response	Coordination and response, sense organs, hormones, homeostasis and tropic responses.
Unit 15 Drugs	Drugs and antibiotic resistance.

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Unit 18 Variation And Selection	Variation, Adaptive features and selection
Unit 19 Organisms and their environment	Energy flow, food chains & food web, nutrient cycle, population size
Unit 20 Human Influences on ecosystem	Food supply, habitat destruction, pollution and conservation.
Unit 21 Biotechnology and Genetic Modification	Using bacteria, yeast and enzymes. Steps in genetic modification.

**Key Coursebook:** Kognity online Course book

## Additional information

1. Kognity online Course book
2. Class worksheets and class notes in Google classroom
3. IGCSE (0610) Past papers including Paper 1, 2, 3, 4 and 6. These papers can be obtained online or from the shared documents on google classroom.

- <https://www.bbc.com/bitesize/examspecs/zcq2j6f>
- <https://www.igcse-sciencecourses.com/>

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