NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

FACULTY OF HEALTH, NATURAL RESOURCES AND APPLIED SCIENCES

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES SCIENCES

DEPARTMENT OF AGRICULTURAL SCIENCES AND AGRIBUSINESS

QUALIFICATION: BACHELOR OF SCIENCE IN AGRICULTURE	
QUALIFICATION CODE: 07BAGA	**LEVEL:** 7
COURSE CODE: IBI511S	**COURSE NAME:** INTRODUCTION TO GENERAL BIOLOGY
SESSION: JUNE 2023	**PAPER:** THEORY
DURATION: 3 HOURS	**MARKS:** 100

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINER(S)	Mr. C. L. Akashambatwa
MODERATOR:	Mrs. L. Theron

INSTRUCTIONS
1. Answer ALL the questions. 2. Write clearly and neatly. 3. Number the answers clearly.

PERMISSIBLE MATERIALS

1. Examination question paper
2. Answering book

THIS QUESTION PAPER CONSISTS OF 3 PAGES (Including this front page)

Question 1

1.1. Name and explain with examples the two types of cell reproduction. (4)

1.2. Name and explain the seven characteristics of living things. (7)

1.3. Name five major components of the cell. (5)

1.4. Why do plants need to exchange gases with the environment? (3)

1.5. Kingdom fungi is divided into five phyla, name them and give one example of each. (10)

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Question 2

2.1. What is a meristem, where are meristems located in plants and what are their functions? (5)

2.2. Distinguish between monoecious and dioecious flowers and give an example of each. (4)

2.3. In the Etosha National park, it is found that some animals occur more abundantly than others. Which animals would you expect to see more, the Lion or the Oryx? Give a reason for your answer. (3)

2.4. Cells are the basic structural units of living organism. Explain what that means. (5)

2.5. Why is a mushroom regarded as a fungus rather than a plant? (3)

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Question 3

3.1. Name the three sources of genetic variation and briefly explain each. (6)

3.2. Distinguish between Prokaryotic and Eukaryotic cells, use a table format. (10)

3.3. Differentiated between root cap and Vascular cambium. (6)

3.4. Explain the cell cycle in full. (8)

[30]

Question 4

4.1. Explain kingdom Protista (3)

4.2. List the functions of the following plant parts; leaf, stem, roots, nodes, internode. (5)

4.3. Explain the process of photosynthesis with a diagram and the chemical reaction formula (6)

4.4. One of Namibia's initiatives to protect and conserve biodiversity outside protected areas is through the CBNRM programme. Define what CBNRM stands for and what are the program's main three elements. (7)

[21]

[TOTAL 100]