

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF INDUSTRIAL TECHNOLOGY

DEPARTMENT OF TECHNICAL TEACHER EDUCATION

Programme: BACHELOR OF EDUCATION HONOURS DEGREE

GENERAL EXAMINATION

Course:	Cell Biology	SBB 1103
Part/year:	I	May 2010
Time:	3 hours	100 marks

Instructions

1. Answer any four [4] questions.
 2. Questions may be answered in any order
 3. All questions carry [25 marks] each, where a question contains subdivisions, the mark value of each subdivision is given in brackets. Illustrate your answer where appropriate with large and clearly labeled diagrams
 4. Begin each question on a fresh page
 5. Marks may be deducted for careless or untidy work
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Question 1

Give an account of the role played by the nucleus in the cell.

[25 marks]

Question 2

Outline the functions of the cell membrane and then describe its structural molecular arrangement.

[25 marks]

Question 3

Given a live healthy rat, describe how you would make a permanent slide of its liver cells.

[25 marks]

Question 4

Compare and contrast between Eukaryotic cells and prokaryotic cells.

[25 marks]

Question 5

Describe the stages of meiosis and its importance to living organisms.

[25 marks]

Question 6

Discuss the composition of the cytoskeleton and how it fulfills its function in the cell.

[25 marks]

END OF EXAMINATION