



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
DEPARTMENT OF APPLIED BIOLOGY AND BIOCHEMISTRY
MASTER OF SCIENCE IN APPLIED MICROBIOLOGY AND BIOTECHNOLOGY
ENTREPRENEURIAL SKILLS (SBB5214)

Examination Paper

MARCH 2025

This examination paper consists of 2 pages

Time Allowed : 3 hours
Total Marks : 100
Special Requirements: NONE
Examiner's Name : DR Z. NTINI

INSTRUCTIONS

1. Answer Four (4) Questions. Each question carries 25 marks.
2. Where a question contains subdivisions, the mark value for each subdivision is given in brackets.
3. Illustrate your answer where appropriate with large, clearly labelled diagrams.

MARK ALLOCATION

QUESTION	MARKS
1.	25
2.	25
3.	25
4.	25
5.	25
6.	25
TOTAL	100

1. CRADLE-TO-CRADLE IN THE CRADLE IN AUSTRALIA

A husband and wife team from Australia have developed innovative nappies known as gDiapers. Jason and Kim Graham-Nye discovered flushable nappies while living in Sydney. The pair quickly snapped up the rights to make and market the product outside of Australia and New Zealand.

When the nappy needs to be changed, the liner snaps out of the pants and the pad can be pushed out into the toilet. A new flushable pad goes back into the liner, and the next nappy is ready to go. The world's first flushable and compostable nappy, developed in Tasmania, is currently being launched in the US market after gaining financial backing from two Australian and three US business angels.

Disposable nappies, with 20 billion thrown away each year, are the third largest contributor to landfills (that's 50 million disposable nappies per day.) The plastic contained in these nappies takes up to 500 years to decompose. Additionally, most of these nappies contain untreated human waste that can leach into the water table. For the Graham-Nyes, disposables were out. Cloth used too much water for the water conscious couple living in drought-stricken Australia.

And then they found it. A company in Tasmania made flushable nappies. They were delighted to find them in their own backyard – well, just a small shipping charge away – and placed an order immediately. The idea went over big with family and friends.

Sources: Victor Bivell, 'Flushable Tasmanian Nappy Hits US Soil', Eco-Investor, December 2005: 16, www.ecoinvestor.com.au/Editions/Eco_Investor_December_2005.pdf; gDiapers Media Kit, www.gdiapers.com/fair-dinkum/newsroom/media-kit.

- (a) Explain the SCAMPER brainstorming technique and how you would apply it to the development of Cradle-to-Cradle flushable diapers. (10 marks)
 - (b) Illustrating with Cradle-to-Cradle flushable diapers, describe how you could use the creative and innovative processes in your business? (15marks)
2. Discuss the importance of scanning the entrepreneurial environments.
 3. Write an essay on a business plan and its importance highlighting its objectives, uses and its users.
 4. Guided by Poza, draw out a constitution for a Family Owned Business of your choice.
 5. Explain what intrapreneurship is, and discuss ways of fostering the culture of intrapreneurship in an organization.
 6. Illustrating with examples, discuss the effects of the national environmental policy and management and its impact on bio-based businesses in Zimbabwe.

END OF EXAMINATION