## RHODES UNIVERSITY DEPARTMENT OF ENVIRONMENTAL SCIENCE

**EXAMINATION: NOVEMBER 2012** 

# ENVIRONMENTAL SCIENCE HONOURS: BIODIVERSITY, NTFPs AND RURAL LIVELIHOODS

Internal examiner: Prof. Charlie Shackleton

**MARKS**: 100

External examiner: Dr Patrick O'Farrell

**DURATION: 3 HOURS** 

#### **Instructions:**

1. Please answer **TWO** questions from Section A, and **ONE** question from Section B.

2. Please number answers clearly.

#### **SECTION A (30 marks)**

(Please answer any TWO questions from this section)

## Question A1 (15 marks)

Is the Sustainable Livelihoods Framework a useful tool for analysis of the contribution of natural resources to rural livelihoods? Justify your answer.

#### Question A2 (15 marks)

In their paper in the journal *Nature*, Peter's *et al.* (1989) argued that the value of NTFPs in tropical forests is a viable alternative to commercial logging of high value timber species. Although there were methodological shortcomings in their study, it is still regarded as a seminal paper. Outline what the methodological shortcomings were and state why they have not detracted from it being a seminal study.

## Question A3 (15 marks)

Ticktin & Shackleton (2011) considered the ecological sustainability of NTFP harvest systems. Discuss the five aspects/scales at which ecological sustainability is typically assessed.

#### Question A4 (15 marks)

Are NTFPs sufficiently important in rural people's livelihoods to warrant attention? Justify your answer.

#### **SECTION B (70 marks)**

(Please answer **ONE** question from this section)

## Question B1 (70 marks)

There is much international debate as to whether the use or marketing of NTFPs is a realistic option for poverty alleviation in developing countries. Critically discuss this debate, substantiating your arguments with examples and case studies where appropriate, and reach a conclusion in favour or against.

#### Question B2 (70 marks)

The valuation of non-timber forest product use is fraught with a number of methodological or terminology related problems. Highlight these by describing how you would go about determining the net annual directuse value of NTFPs used per household in a village of 100 households situated in a typical savanna or forest region.

## Question B3 (70 marks)

As an expert in NTFPs and rural livelihoods you are approached by a local NGO to advise them about the potential benefits and pitfalls associated with commercialisation of woven reed products made by a group of twenty rural women in a village 5 km from the Dolphin View and Kob Inn on the Wild Coast (about 40 km from the nearest urban centre). Describe the issues you would discuss with them.

END OF EXAMINATION PAPER