



FACULTY	AGRICULTURE, ENGINEERING & NATURAL SCIENCES
SCHOOL	SCIENCE
DEPARTMENT	ENVIRONMENTAL SCIENCE
SUBJECT	INTEGRATED NATURAL RESOURCES MANAGEMENT II
SUBJECT CODE	EBL 3852
DATE	OCTOBER/NOVEMBER 2022
DURATION	3 hours
MARKS	100

REGULAR EXAMINATION

Examiners: Prof I. Mapaire (University of Namibia)

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Moderator: Prof C.T. Downs (University of KwaZulu-Natal)

This examination paper consists of 3 pages (including the front page)

Instructions

- Answer **all** questions from Section A
- Answer **only two (2)** questions from Section B.
- The use of scientific calculators is allowed

Section A

This section is worth 50 marks. Answer **all** questions from this section

Question 1 [25 marks]

- 1.1 The United Nations proclaimed 21st March as the International Day of Forests in 2012 to raise awareness about the importance of forests and the challenges they face. The Theme for the 2022 International Day of Forests was *Forests and sustainable production and consumption*. All countries are encouraged to undertake local, national and international activities involving forests and trees to commemorate this Day.
- (a) Suggest a theme for the International Day of Forests for next year, 2023. (1)
 - (b) Design a poster to be used by the Namibian Directorate of Forestry to commemorate the International Day of Forests in 2023. (6)
 - (c) Suggest any **two** (2) key activities you would personally do to commemorate Namibian forests and woodlands on this Day in 2023. (2)
- 1.2. Some Western countries and ‘animal rights’ groups are against trophy hunting. However, most southern African countries continue with trophy hunting despite such complaints and opposition. Argue that trophy hunting benefits conservation efforts and uplifts the livelihoods of local communities. (10)
- 1.3. Discuss the limitations of the Hedonic Pricing Method. (6)

Question 2 [25 marks]

- 2.1. Explain why the holistic ecosystem management approach is so important to fisheries management. Support your answer with some examples. (7)
- 2.2. Defend the statement, “Integrated Water Resources Management must also be considered on a temporal scale”. Support your argument with examples from Namibia. (8)
- 2.3. Explain the importance of transboundary cooperation with neighbouring countries when considering the Zambezi and Kavango Rivers. (4)
- 2.4. Prioritise the approaches you as a manager will apply to prevent or mitigate conflict between different stakeholders. (6)

Sub-total marks (Section A) = 50

Section B

This section is worth 50 marks. Answer any **TWO** questions from this section

Question 1 [25 marks]

- 1.1. Discuss the approach you would follow to ensure that any development minimises negative impacts on ecosystems despite you not having all the necessary information. (15)
- 1.2. Explain the integrated nature of inland fisheries in the Zambezi Region when considering Fisheries Reserves. (10)

Question 2 [25 marks]

You have been appointed the Minister of Finance & Economic Development in a newly-formed African country. Most Parliamentarians want the country to adopt a Command Economy approach, while you and the President favour a Mixed Economy approach. Motivate and convince the Parliamentarians that a Mixed Economy is better and caution them on the drawbacks of a Command Economy. (25)

Question 3 [25 marks]

- 3.1. Elaborate on the indicators of success that can be used to assess the effectiveness of Integrated Water Resource Management. max (15)
- 3.2. Discuss the guiding principles of water that you, as a manager, need to consider when managing freshwater resources. max (10)

Sub-total marks (Section B) = 50

Grand Total Marks =100

*****END OF EXAMINATION *****