



MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

FACULTY OF AGRIBUSINESS AND COMMENCE

DEPARTMENT: AGRICULTURAL ECONOMICS AND DEVELOPMENT

MODULE: INSURANCE AND RISK MANAGEMENT IN AGRICULTURE

CODE: HACE424

SESSIONAL EXAMINATIONS

August 2022

DURATION: 3 HOURS

EXAMINER: MS P. DUBE

INSTRUCTIONS

- 1. Answer any four (4) questions*
- 2. Start a new question on a fresh page*
- 3. Total marks 100*

QUESTION 1

Risk management is described as process dealing with uncertainties resulting from farm or firm's exposure:

- a) Discuss the process of risk management (12)
- b) Highlight the rationale of risk management in agriculture (5)
- c) Outline five principles of managing operational risk exposure (8)

QUESTION 2

Discuss how social, economic and responses to climate change exacerbates or lessen risk in Agriculture (25)

QUESTION 3

Using Iturnoz (2009) method of indemnity-based insurance classification, discuss in the following types of insurance with reference to agriculture

- i. Crop insurance (4)
- ii. Crop revenue insurance (4)
- iii. Index Based insurance (7)
- iv. Livestock Stock Insurance (6)
- v. Farm Implements Insurance (4)

QUESTION 4

- a) Highlight the effects of risk on the following:
 - i. Farm production
 - ii. Investment in agricultural sector
 - iii. Welfare of farmers (9)

- b) Discuss in detail at least four principles of risk management in agriculture (16)

QUESTION 5

- a) Risk is incidental to life. Explain the various ways in which people react to risk (6)
- b) Weather based instruments are increasingly used to control risk associate with climate change briefly discuss at least three factors that can limit the effectiveness of weather-based instruments in mitigating risk. (6)
- c) State the sources and how you would prevent the following type of risk:
- i. Institutional risk (3)
 - ii. Financial risk (3)
 - iii. Human risk (3)
- d) Covid 19 is an example of uncertainty that affected agriculture globally, outline four effects posed by Covid 19 to agriculture in Zimbabwe. (4)

QUESTION 6

- a) Future contracts are often used to hedge risk exposure by removing the uncertainty about the future price of an asset. With the aid of an example describe two future hedging strategies (8)

b) A farmer is seized with the problem of choosing one of the two enterprises with the following probability distributed of the expected cash flows in each of the next 3years. Determine which project is riskier.

Enterprise A		Enterprise B	
Probability	Cash flow (thousand US\$)	Probability	Cash flow (thousand US\$)
0.1	1.5	0.1	1
0.2	1,75	0.25	1.5
0.4	2.0	0.3	2
0.2	2.25	0.25	2.5
0.1	2.5	0.1	3.0

END OF EXAMINATION