



STRATHMORE BUSINESS SCHOOL
MASTER OF MANAGEMENT IN AGRIBUSINESS
END OF SEMESTER EXAMINATION
MMA 8103: FARMING SYSTEMS

DATE: Monday, 9th February 2026

TIME: 3 Hours

Instructions

This paper consists of **THREE** sections. Read **ALL** instructions for each section carefully before attempting any question.

SECTION A

(Answer **ALL** the questions)

QUESTION ONE

(24 MARKS)

- a) Define a farming system and explain how it differs from a production enterprise within agricultural systems. **(6 Marks)**
- b) Differentiate between subsistence, semi-commercial, and commercial farming systems, providing one real-world example of each. **(6 Marks)**
- c) Explain the concept of agro-ecological zoning and discuss its relevance in selecting optimal farming systems. **(6 Marks)**
- d) Describe the role of climate variability in influencing cropping calendars within mixed farming systems. **(6 Marks)**

SECTION B

(Answer **ANY THREE** questions)

QUESTION TWO

(12 MARKS)

Discuss the key socio-economic drivers that determine farmers' adoption of technology in smallholder mixed crop-livestock systems in East Africa.

QUESTION THREE

(12 MARKS)

Evaluate the ecological and economic trade-offs between monocropping and intercropping systems in tropical regions. Use examples to support your argument.

QUESTION FOUR

(12 MARKS)

Using the Sustainable Livelihoods Framework (SLF), assess how farming systems contribute to resilience at household level in rural economies.

QUESTION FIVE

(12 MARKS)

Critically assess the ecological and socio-economic drivers behind the adoption of organic agriculture in developing countries. In your answer, discuss the roles of market incentives, environmental sustainability, policy frameworks, and knowledge systems. Provide relevant examples from Sub-Saharan Africa.

SECTION C

(Answer **ANY TWO** questions)

QUESTION SIX

(20 MARKS)

Critically analyze the role of digital agriculture (D4Ag) in transforming farming systems in Africa. Discuss both opportunities and constraints.

QUESTION SEVEN

(20 MARKS)

Compare and contrast intensive livestock systems with extensive pastoral systems focusing on land use, productivity, environmental impacts, and policy implications.

QUESTION EIGHT

(20 MARKS)

Discuss the future of farming systems under climate change scenarios for Sub-Saharan Africa. Highlight adaptation pathways, institutional requirements, and economic implications.

QUESTION NINE**(20 MARKS)**

Evaluate the challenges associated with the certification and commercialization of organic products in global value chains. Discuss how certification standards, transaction costs, institutional capacity, and consumer perceptions shape market access and competitiveness for smallholder farmers.