

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE

MFS510

Department of Agricultural Economics, Education and Extension
MSc in Food Security and Sustainable Agriculture
Food Security and Climate Change

3 HOURS (100 MARKS)

INSTRUCTIONS TO CANDIDATE

Answer question **One** from **SECTION A** and any **Two** questions from **SECTION B**.

SECTION A (COMPULSORY)

1. (a) Discuss how communities have been adapting and mitigating climate change impacts relative to food pricing and access. [15 Marks]
- (b) Discuss how climate change affects agriculture and food security. [15 Marks]
- (c) i. Identify five sources of GHG emissions from the food system. [5 Marks]
- ii. rank them in order of importance, and propose interventions that could reduce emissions from each source. [15 Marks]

SECTION B

2. (a) Discuss the main challenges in the adoption of CSA practices at smallholder level. [10 Marks]
- (b) Explain why strengthening the resilience to drought and disaster through sustainable land management is key for sustainable development. [15 Marks]
3. (a) Discuss strategies that reduce vulnerability to climate change whilst ensuring food security. [15 Marks]
- (b) Discuss why socio-economic factors are often linked to resilience of a community to climate change. [10 Marks]
4. (a) Explain three major options for mitigating climate change. [15 Marks]
- (b) What are the food policies needed to address the multiple burden of malnutrition in the face of climate change? [5 Marks]
- (c) What are the effects of climate change on world hunger? [5 Marks]

END OF PAPER