

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF AGRICULTURE AND ENVIRONMENTAL SCIENCE
DEPARTMENT OF AGRICULTURE ECONOMICS AND EXTENSION
MSc FOOD SECURITY AND SUSTAINABLE AGRICULTURE

MFS 510: FOOD SECURITY AND CLIMATE CHANGE

00 00 2022

DURATION: 3 HOURS

TOTAL MARKS: 100

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE IN SECTION A and ANY OTHER TWO QUESTIONS FROM SECTION B.

SECTION A (COMPULSORY)

1. (a) Discuss the effects of climate change on the four dimensions of food security. **[20 Marks]**

(b) Discuss the impacts of climate change on food security in African cities. **[20 Marks]**

(c) Outline knowledge barriers associated with selecting climate action for Food security in Africa. **[10 Marks]**

SECTION B

2. (a) Explain the characteristics of a climate smart farm. **[10 Marks]**

(b) Explain the impacts of climate change on crop yields. **[15 Marks]**
3. Climate change has resulted in unfair on pricing and poor access by the majority of the population in developing countries. Discuss **[25 Marks]**
4. (a) Distinguish the following and giving appropriate examples:
 - i. Soft and hard adaptation for water resources **[5 Marks]**
 - ii. Adaptation and resilience **[5 Marks]**
(b) Identify appropriate responses to achieve gender equality and food security in smallholder farming under a changing climate **[15 Marks]**

END OF PAPER