MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

FACULTY OF AGRIBUSINESS AND COMMERCE

DEPARTMENT OF AGRICULTURE ECONOMICS AND DEVELOPMENT

ANNUAL CROP PRODUCTION

Code: AEDT105

END OF SEMESTER EXAMINATIONS
AUGUST 2022

DURATION: 3 HOURS

EXAMINER: Mr N. SAKADZO

INSTRUCTIONS

1. *Answer any **Four** questions*
2. *Be concise and clear*
3. *Total marks 100*

ADDITIONAL MATERIAL

1. *Calculator*

Question one

a) Discuss how agro-ecological zone influence farmers' choice of:

i. Cultivar **[4]**

ii. Time of planting **[3]**

iii. Plant population **[3]**

b) Describe the anti-nutritional factors associated with small grains you have studied. **[15]**

Question two

a. Discuss the possible causes of harvesting losses in soyabeans or groundnuts under the following:

i. Hand method, and **[8]**

ii. Use of machinery **[8]**

b. Explain how farmers can use the knowledge of botanical characteristics in managing the crop **[9]**

Question three

a) Discuss wheat (*Triticum aestivum*) under the following headings

i. Uses **[4]**

ii. Climatic and soil requirements **[4]**

iii. Fertilizer requirements **[4]**

iv. Pests and disease control **[4]**

v. Signs of maturity **[4]**

vi. Harvesting **[5]**

Question four

a) A farm manager in Headlands wishes to establish a maize crop with a 95% germination. The recommended seed rate for the crop is 25kg/ha.

i. How many kgs of seed does the manager plant on a plot measuring 100m by 75m to achieve the required plant population? **[5]**

b) The manager used a planter of 90% efficiency, calculate the amount of seed to be fed into the machine for the same plot **[3]**

c) Explain how the farmer should manage moisture between planting and harvesting **[8]**

d) Explain why biological methods of controlling diseases could be unsuitable for smallholder farmers in Zimbabwe **[5]**

Question five

A farmer is willing to venture into paprika (*Capsicum annum* L.) production on his piece of irrigable land.

Advise the farmer on the following:

i. Legislation that governs production of paprika in Zimbabwe **[4]**

ii. Choice of variety **[4]**

iii. Climatic requirements for paprika **[4]**

iv. Soil requirements for paprika **[4]**

v. Control of common pests and diseases with specific examples **[4]**

vi. Signs of maturity **[3]**

vii. Harvesting **[2]**

END OF EXAM