



MANICALAND STATE UNIVERSITY OF APPLIED SCIENCES

FACULTY OF AGRIBUSINESS AND COMMERCE

DEPARTMENT OF AGRICULTURE ECONOMICS
AND
DEVELOPMENT

PRACTISE IN BASIC FARM MANAGEMENT AND MECHANISATION

Code: AEDT 225

END OF SEMESTER EXAMINATIONS
JULY 2022

DURATION: 3 HOURS

EXAMINER: Mr N. SAKADZO

INSTRUCTIONS

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

Question one

- a) Describe the two most common tobacco barns found in Zimbabwe outlining their advantages and disadvantages [15]
- b) Explain factors to be considered when constructing a tobacco barn [10]

Question two

- a) Define fault finding [1]
- b) Discuss steps to be considered when carrying out fault finding on a tractor [15]
- c) Describe the three tractor hitching systems with specific examples of machinery [9]

Question three

- a) Describe the principle operation of a maize Sheller [10]
- b) Outline the routine maintenance of a maize Sheller [5]
- c) Explain the advantages and disadvantages of using a maize Sheller over manual labour [10]

Question four

- a) Describe the importance of the following:
 - i. Land act [5]
 - ii. Land and estates valuations [5]
 - iii. GIS [5]
 - iv. Management spreadsheets [5]
 - v. Mechanisation [5]

Question five

- a) Describe the calibration of the following farm machinery
- i. Boom sprayer [5]
 - ii. Vicon spreader [5]
 - iii. Tractor drawn plough [5]
- b) State two reasons for sprayer calibration [2]
- c) You are provided with the following information which was collected during field calibration of a tractor drawn boom sprayer:
- Speed = 30km/hr
Nozzle flow rate = 0.5L/min
Swath = 0.5m
- i. Calculate the boom sprayer application rate in litres per hectare [8]

END OF EXAM