



**GARY MAGADZIRE SCHOOL OF AGRICULTURE AND NATURAL SCIENCES**

**DEPARTMENT OF SOIL AND PLANT SCIENCES**

**DIPLOMA IN SUGARCANE AGRICULTURE**

**LEVEL 1 SEMESTER 1**

**EXAMINATION QUESTION PAPER**

**MODULE CODE: DSA 104**

**MODULE NARRATION: SUGARCANE AGRONOMY**

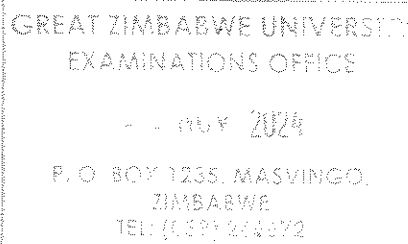
**DATE:**

**DURATION: 2 HOURS**

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**INSTRUCTIONS TO CANDIDATES:**

- 1. Answer any three questions.**
- 2. Each question carries 20 marks.**



1. As the farm supervisor at Hippo Valley Estates, your boom sprayer covers 3.5m spray width, your tractor can travel at a speed of 0.5m per second, while the boom can release chemical at 1.5litre per second. Calculate the following  
(a) Time required to cover 7.5ha of land [10]  
(b) Spray volume required to cover this field. [10]
2. Describe the factors which affect the production and distribution of sugarcane in Zimbabwe [20]
3. Discuss the different ways in which smallholder farmers may improve the production efficiency of sugarcane in Zimbabwe [20]
4. As an agronomist, describe how integrated pest and disease management can be implemented in a sustainable manner to control Eldana of sugarcane in Zimbabwe [20]
5. (a) What factors should farmers consider when choosing an irrigation method? [10]  
(b) Explain any five (5) farming practices that improve soil structure. [10]

**END OF PAPER**