

VF DAGRI Past Papers



Sir Arthur Lewis Community College  
End of Semester Examinations  
Division of Agriculture  
Certificate Programme In Agriculture  
Semester II



Course: **Basic Farm Machinery and Buildings BFM 512**

Date: **Monday, May 13, 2002.**

Time : 9:00 am

Duration: 2 ½ hours

*Instructions : Answer All questions*

1. (a) Explain in detail why the orientation of farm buildings is important in St Lucia.  
(5 marks)
- (b) Outline the benefits of a slatted floor system compared to solid floors for rearing sheep.  
(5marks)
  
- 2 (a) What are the main wooden members of a gable roof? (2 marks)
- (b) What are the main wooden members of a slatted floor? (1 mark)
- © What are the uses of the following in farm building construction:
  - i. steel mesh (4 marks)
  - ii Concrete blocks (1 mark)      ii. Gravel (1 mark)
- (d) What are the advantages and disadvantages of the following materials in the uses mentioned below?
  - i. Polyethylene used as a covering material. (5 marks)
  - ii. Saran used as covering and cladding. (5 marks)
  - iii. Corrugated galvanized metal for covering. (2 marks)



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3 What precautions should one take in preparing the foundation of a small nursery building with:

- i. a steel frame
- ii. a wooden frame.

(2 marks each)

4 (a) List the function of each of the following parts of the Lever- operated knapsack sprayer. (4 marks)

- i Lance
- ii. pressure chamber
- iii. nozzle
- iv. in line filter

(b) What are the weaknesses of lever-operated knapsack sprayer? (3 marks)

© What improvements can be made to this sprayer to improve on these shortcomings. (2 marks)

(c) What are of the advantages of mist blower application of pesticide over the use of lever operated knapsack sprayers. (3 marks)

5 (a) Describe how one should go about setting up a pump for the abstraction of water from a river. (4 marks)

(b) What are the principal needs for the engine of such a pump to start? (3 marks)

© A two stroke engine uses a fuel to lubricant ratio of 24:1. How much oil must be mixed with 3 litre of petrol to operate this engine? (2 marks)

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(d) What checks should one perform before setting out with a farm vehicle he has not used in the last three days. *(3 marks)*

6 (a) Name two types of air cleaner found on small farm engines. *(2 marks)*

(b) Outline how each type of cleaner is maintained. *(4 marks)*

7 (a) What are the likely benefits of manual wheel roll seeder in local farming?

*(2 marks)*

(b) What are the primary requirements for this equipment to be effective?

*(2 marks)*

