UF DAGRI PAST PAPERS.

SIR ARTHUR LEWIS COMMUNITY COLLEGE

End of Semester Examination
Academic Year 2003-2004 Semester Two
Division of Agriculture
Certificate Program in Agriculture
Course :Basic Farm Machinery and Buildings. BFM

Monday, May 04, 2004. Time: 9:00 am Duration: 2 ½ hours

Instructions: Answer four (4) questions. Two from each section.

#F12

Section A

1 (a) List as many separate applications of small engines as a power source on farms in Saint Lucia. *(3 marks)*

(b) What characteristics of these engines make them useful to local farmers? *(4 marks)*

(c) What are some of the problems experienced by users of small engines in Saint Lucia? *(4 marks)*

(d) What are the limitations of human labour as a power source for farmers? *(4 marks)*

(e) What situations and conditions make human labour a good choice of power for farmers? *(5 marks)*

2. (a) List the components of a drip irrigation System and give the function or functions of each component. *(5 marks)*

(b) Give two advantages and two disadvantages of using this method of irrigation. *(4 marks)*

(c) Indicate clearly when one should use motorized knapsack mist blowers and also explain what aspects makes them so useful to crop producers generally. *(7 marks)*

(d) What are the possible disadvantages of motorized equipment for pesticide application on farms in St Lucia? *(4 marks)*

3. (a) What is meant by the term **Capacity** with respect to farm tools and equipment. (Give examples with respect to two selected tools or equipment.) *(4 marks)*

(b) Give three reasons why farmers would purchase machines for use on their farms. *(5 marks)*

(c) What are the disadvantages of lever-operated knapsack sprayers for pesticide and herbicide application on farms in Saint Lucia. *(5 marks)*

(d) Suggest plausible reasons why **productivity is low** for weed control operations in Crop Enterprises in Saint Lucia. Suggest specific measures that can be taken to increase productivity. *(6 marks)*

Section B

4. (a) Outline separately the benefits of good ventilation in (i) chicken and (ii) propagation shelters. *(5 marks)*

(b) Explain clearly the various methods by which ventilation is accomplished or promoted in these shelters. *(5 marks)*

(c) Explain five factors one should take into consideration in setting up a raised - floor sheep pen. [Do not include ventilation]. *(10 marks)*

5. (a) What are the functions of the following in chicken shelters?

(i) anchor straps or bolts (ii) roof and eaves *(4 marks)*

(b) Explain two precautions that must be taken to ensure that concrete used in pig shelters is strong enough. *(4 marks)*

(c) What are the applications of plastics in farm shelters and what properties make plastic attractive for these uses? *(8 marks)*

(d) What are some disadvantages of using plastics in the applications you have mentioned. *(4 marks)*

6. (a) List three floor types utilized for production buildings in agriculture. *(3 marks)*

(b) Give instances or situations where Saint Lucian farmers utilize each floor type. *(6 marks)*

(c) What are the advantages of <u>each</u> floor type in the applications you have mentioned? *(5 marks)*

(d) What are the disadvantages of <u>each</u> floor type for the various each of the various uses they are put to locally? *(5 marks)*