

VF BAGE Past Papers



Sir Arthur Lewis Community College  
Division of Agriculture  
End of Semester II Examination  
Academic year 2002-2003  
Certificate Programme in Agriculture  
Course: Basic Farm Machinery and Buildings



Wednesday May 07, 2003

Time: 9: 00 am

Duration: 2 hours and 20 min.

# F10

*Instructions: Answer any four (4) Questions. Answers must be clearly written. List only where you are required to do so.*

1.
  - (a) What properties of plastics make them useful in agricultural applications?
  - (b) Outline the main disadvantages of plastics as a material used in farm buildings.
  - (c) Outline the various applications of fabric steel meshes giving reasons why they are used in these applications.
  - (d) Comment on the merits of slatted floors for sheep and goat production.
  - (e) What factors should be considered in constructing a forage feeder for sheep.
  
2.
  - (a) State clearly the benefits of providing shelter for plant nursery activities.
  - (b) List three precautions one should take when building floors for pig pens. Explain why these precautions are useful.
  - (c) Where are joists located in farm buildings and comment on the maximum spacing for joists in sheep and goat shelters.
  - (d) Explain the importance of the presence of aisles and the sizes of these aisles in crop production and animal production shelters.

3. (a) In which farm shelters is temperature control important and why?
- (b) How does one achieve good temperature control in any two of the shelters you have mentioned in your answer to part (a) above?
- (c) Give critical aspects of the local farming situation that favour the use of small machines/ equipment.
- (d) Explain concisely what is meant by the **machine capacity** of a lever operated knapsack sprayer.
- (e) Give reasons that may result in low machine capacity of this sprayer during application of pesticides to greenhouses.
4. (a) Explain how one carries out an oil change on a farm goods vehicle.
- (b) Why is there need for an oil change in such vehicles?
- (c) List four important checks one would perform before setting off with a farm vehicle on any day.
- (d) Give the advantages of using small engines as a source of power on local farms.
5. (a) How would one check that an engine-powered pumping unit works?
- (b) Given that it does work, what are the possible reasons that may explain why it still may not lift water from the water source?
- (c) What farm or job situations would suggest to a worker that he should select a mist blower rather than a lever operated knapsack sprayer for a spraying operation.
- (d) How does one ensure that cooling is accomplished in mist-blower engines?

