

00008



The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Technology

Final Examination- 2011/2012

AEX6230 Environmental control in agricultural Structures

Date : 20/03/2012
Time : 02:00am-05:00pm
Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. a). List out main purposes of keeping livestock.
b). Briefly explain importance of environmental control in improved livestock breed's management.
c). Briefly discuss factors which are considered when designing livestock structures in tropical climate.
2. a). List out livestock which shows different animal behavior pattern.
b). Giving examples briefly discuss how can animal behavior influence on designing farm structures.
3. a). Write down environmental factors which should be considered in order to create a good animal housing design.
b). Briefly discuss effect of environmental factors on livestock performance.

4. Assume that you are planning to start a farm with 30 cows in an arable land owned by you and briefly discuss facilities which should be included in dairy unit in your farm design and importance of each component.
5. Write down short notes in any three of the following,
- a). Hand Milking vs. Machine Milking
 - b). Dry sow pens
 - c). Deep litter system
 - d). Natural convection
6. a). What is "mixed mode heat transfer"?
- b). Briefly discuss the importance of heat and moisture control in livestock building.