



The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Industrial Studies Honours (Agriculture) Programme
Final Examination- 2017

AEX6234 Environmental Control in Farm Structures

Date: 18.11.2017
Time: 9.30 a.m. – 12.30 p.m.
Duration: Three (03) hours

SECTION 11

- Contains **six (06)** questions.
 - Answer any **four (04)** questions.
 - You may spend **two (02)** hours
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1. Critically evaluate the suitability of controlled environment agriculture to increase vegetable production in Sri Lanka.
2. Wood, thatch and straw, burnt clay bricks, concrete and corrugated aluminum sheets are commonly used materials for the construction of farm structures in Sri Lanka. Critically evaluate the suitability of each material in constructing animal barns in the wet and dry zones of Sri Lanka.
3. Assumed that you have been assigned a task to select a suitable site for an animal farm.
 - i. What are the factors you may consider when selecting the site?
 - ii. Describe how above factors contribute to improve the productivity of the farm.
4.
 - i. Explain the importance of studying theories of heat transfer with respect to the construction of animal houses.
 - ii. Describe the measures can be taken to control temperature inside a cattle barn in dry zone of Sri Lanka.
5.
 - i. Differentiate pressure system from exhaust system in mechanical ventilation.
 - ii. Describe the importance of ventilation in farm structures.
6. Write short notes on any **two (02)** of the following
 - i. Farm waste management.
 - ii. Importance of moisture control in farm structures.
 - iii. Building elements.