



The Open University of Sri Lanka  
 Faculty of Engineering Technology  
 Industrial Studies Programme (Agriculture)  
**Final Examination- 2012/2013**  
**AEI6234 Enviorenmental Control in Farm Structures**

**Date** : 21/ 08/ 2013  
**Time** : 0930-1230 hours  
**Duration** : Three (03) hours

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**SECTION 2: Answer only Four (04) questions**

1. Write an essay on site selection for farmstead development.
2. Discuss the systems of poultry management.
3. (i) Briefly explain the importance of commercial green houses in agriculture  
 (ii) Explain the effect of moisture and temperature on grain storage  
 (iii) Briefly explain the following processes
  - (a) Composting
  - (b) Biogas production
4. (i) Briefly explain the ways of heat transfer  
 (ii) (a) Briefly explain the use of psychrometric chart in controlling the environment in farm structures  
 (b) List the properties shown on a psychrometric chart  
 (iii) Explain types of mechanical ventilation systems
5. Write short notes on three of the following:
  - i. Evaporative cooling
  - ii. Silo designs and location
  - iii. Manure management
  - iv. Ventilation of farm structures by natural means
  - v. Deep litter system
6. (i) Explain the components of an intensive swine management system  
 (ii) Diagrammatically describe the life cycle of a pig