



The Open University of Sri Lanka
 Faculty of Engineering Technology
 Diploma/Degree in Technology & Industrial Studies (Agriculture)
 Final Examination- 2009/2010
 AEX4230 Integrated Crop Protection

Date : 05 -03 - 2009
 Time : 0930-1230 hours
 Duration : Three (3) hours.

SECTION II

1.
 - a.) Explain how to obtain genetic control of a pest population.
 - b.) How the insect growth regulators use for integrated pest management programs.
 - c.) Explain the problems of using pesticides in integrated pest management programs.
2. "Banana rhizome weevil is one of the common pests in banana plantations".
 - a.) Write the scientific name of the Banana rhizome weevil.
 - b.) Name the characteristic features of the pest helpful in identification.
 - c.) Explain the damage of the pest.
 - d.) Write the pest control measures.
3. "Non chemical pest control means eliminate or control pest by attracting, repelling, or killing pest without use of chemicals. There are many non-chemical pest control methods are available among farmers." Critically evaluate the above statement.
4.
 - a.) Explain the role of insects in agricultural environments.
 - b.) How does the pesticides affect on food webs/chains.
 - c.) Write how to affect the following economic factors on pest control
 - i. Uses of the crops
 - ii. Type of chemicals use
 - iii. Method of chemical application
5. Critically evaluate the influence of environment on plant disease development.
6. Explain any four (04) of the following.
 - a.) *Echinochloa crusgalli*
 - b.) Insecticide formulations.
 - c.) Safety precautions to follow up in pesticide application.
 - d.) Shot hole borer damage in tea plantations.
 - e.) Typical life cycle of Nematodes.



The Open University of Sri Lanka
Faculty of Engineering Technology
Technology and Industrial Studies Programme
Final Examination- 2009/2010
AEX4231 Food and Nutrition

Date : 23-03-2010
Time : 1400-1700 hrs
Duration : Three (03) hours

Registration No: Index No.....

SECTION II: Answer any four questions.

- (1) (a) Explain the role of proteins in food industry and as food constituent.
(b) Write a brief account on "Carbohydrates in human diet".
- (2) (a) Discuss the importance of chemical properties of simple sugars.
(b) Explain the importance of polysaccharides in industrial applications.
(c) State the difference between glycogen and cellulose.
- (3) (a) "Stomach plays different roles in the process of digestion" comment on this statement.
(b) Briefly explain the abnormalities of metabolism can be expected due to the deficiencies of calcium, phosphorus and magnesium.
- (4) (a) What are the components of food policies? Briefly explain them.
(b) Briefly discuss the nature and dimensions of world food problems.
- (5) (a) briefly explain the role and use of lipids in foods.
(b) Describe the "fate of absorbed fat in human body".
- (6) Write short notes on any three (03) topics of the following.
(a) Modification of fats and oils.
(b) Role of insulin in human body.
(c) Catabolic pathway in metabolism.
(d) Provitamins and Antivitamins