



The Open University of Sri Lanka  
Faculty of Engineering Technology  
Diploma/Degree in Technology & Industrial Studies (Agriculture)

Final Examination - 2013/14

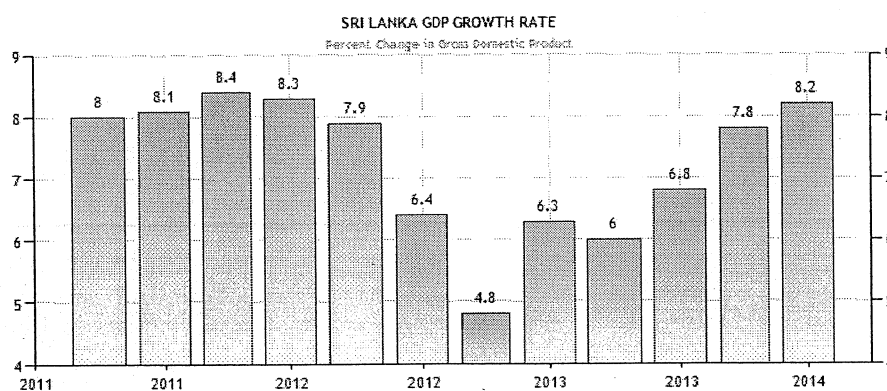
AEM 4234 - Agricultural Economics & Management.

Date : 31 - 08 - 2014

Time : 9.30 - 12.30

**SECTION II - Answer any four (04) questions**

1. The graph below shows the GDP growth rate of Sri Lanka over the years as published by the Department of Census and Statistics.



Answer the following questions

- i. What is GDP? (8 marks)
  - ii. Describe GDP growth rate using the information in the above graph. (5 marks)
  - iii. Some economists argue that the growth figures are manipulated and bloated growth figures are shown. Discuss how GDP growth statistics can be manipulated considering components contributing to the GDP. (12 marks)
2. The following table provides information about the production possibilities frontier of a farmer in the Nuwara Eliya District producing Milk and Potato.

Potato (kg)	Milk (liters)
0	500
100	450
200	390
300	300
400	170
500	0

- (i) Draw the farmer's production possibility frontier
  - (ii) Assume the farmer is operating at 300 kg of potato and 300 liters of milk,
    - a. What is the opportunity cost of producing additional 100 kg of potato?
    - b. What is the opportunity cost of producing additional 90 liters of milk?
  - (iii) Suppose the farmer is currently producing 200 kg of potato and 300 liters of milk.
    - a. Is the farmer efficiently producing potato and milk?
    - b. How many additional kg of potato could the farmer produce without giving up any milk?
    - c. How many additional liters of milk could the farmer produce without giving up any potato?
3. Briefly explain the importance of **two (02)** of the followings in relation to sustainable agriculture. (12.5 marks each)
- (i) Fertilizer subsidy and food security
  - (ii) Import taxes and agricultural production
  - (iii) Environmental regulations
4. (i) Discuss the importance of record keeping in a farm enterprise (12.5 marks)
- (ii) The effectiveness of an organization depends on the behavior and performance of human resources. Discuss. (12.5 marks)
5. Suppose a farmer wanted to cultivate one hectare of Banana, and you were asked to do the feasibility of the project.
- (i) What types of analysis you would do? (3 marks)
  - (ii) List down the information you needed to carry out the above analysis. (5 marks)
  - (iii) What are the parameters you would use to evaluate the project, and how would you use these parameters to accept or reject the project? (6 marks)
  - (iv) Graphically show the relationship between the discount rate and the net present value of a project and how would you determine the Internal Rate of Return. (6 marks)
  - (v) How would you convert a financial analysis to an economic analysis? (5 marks)
6. Write short notes on **four (04)** of the following topics (25 marks)
- (i) Partial budgeting and farm enterprise
  - (ii) Producer surplus and consumer surplus
  - (iii) Maximum sustainable yield (MSY) of a natural resource which is renewable
  - (iv) Human resources of an organization
  - (v) Market failure
  - (vi) Inflation