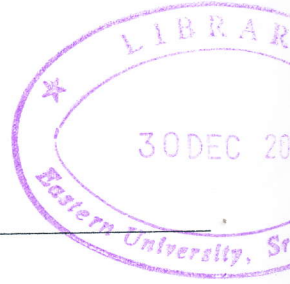


EASTERN UNIVERSITY, SRI LANKA  
SECOND YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE- 2011  
EXTERNAL DEGREE  
AEC 2101: FARM MANAGEMENT ECONOMICS



Answer All questions

Time: 3 Hours

1. a) What do you mean by a farm record?  
  
b) Discuss the purpose and use of farm records in farm management.  
  
c) List the objectives of farm management.
  
2. a) What do you understand by the term "Investment Analysis" and briefly explain any 3 methods of analyzing and comparing investments?  
  
b) For the following data on two project alternatives, find out the most profitable investment using Payback period method.

**Investment alternatives**

Item	Project A	Project B
Capital outlay	\$ 10,000	\$ 10,000
Net cash revenues		
Year 1	2,500	4,000
Year 2	2,500	4,000
Year 3	2,500	4,000
Year 4	2,500	-
Year 5	2,500	-
Year 6	2,500	-
Annual depreciation	\$1,667	\$3,333

3. a) Briefly describe the assumptions of Linear Programming?

b) A meat processing farm produces 2 products, called bacon and sausages. Production capacity of farm in terms of operation is 8 hours a day. Production process is as follows.

Bacon is first cut and packed. 1MT of bacon uses upto  $\frac{1}{2}$  hours of cutting and  $\frac{1}{3}$  hours of packaging capacity. Sausages is mixed and packed. 1MT of sausage uses 1 hour of mixing,  $\frac{2}{3}$  hours of packaging capacity.

Net return for bacon is Rs. 400 per MT

Net return for sausage is Rs. 300 per MT.

- i. What is the optimum production for bacon and sausage per day?
- ii. What is the optimal profit level subject to the constraints?

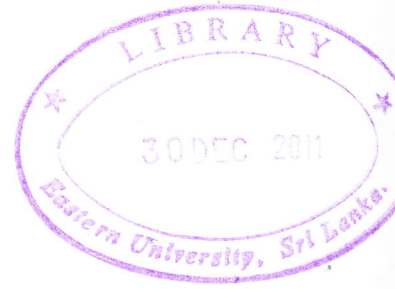
4. a) Briefly explain the steps involved in farm planning.

b) Prepare the partial budget for the following data. The proposed change is the addition of 50 beef cows to an existing herd. However, as not enough forage is available, 100 acres currently in grain production must be converted to forage production.

Interest on cows/ Bulls	Rs. 250,000
Taxes	Rs. 10,000
Labor cost on rearing cows	Rs. 60,000
Fertilizer cost	Rs. 275,000
Seed cost	Rs. 120,000
Chemical cost	Rs. 150,000
Pasture fertilizer cost	Rs. 150,000
Feed and hay cost	Rs. 200,000
Veterinary and health cost	Rs. 50,000
Labor cost on grain production	Rs. 150,000

Revenue from grain production (5000 bushels @ Rs. 400 per bushel)

Revenue from 5 cull cows	Rs. 250,000
Revenue from 18 heifer calves	Rs. 645,800



5. a) Briefly discuss the causes of depreciation.

b) Assume that a new machine is purchased on January 1<sup>st</sup> for Rs.30,000 and given salvage value of Rs. 3000 at 10 years useful life.

What would be the annual depreciation for the first 3 years under **any two** of depreciation methods given below.

- i. Straight line method,
- ii. Sum-of-the year digit method, or
- iii. Double declining balance method.

6. a) What are the sources of risks and briefly discuss ~~three~~ of them.

b) List the production risk tools and explain how these different strategies could be used to reduce risks.

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