



EASTERN UNIVERSITY, SRI LANKA

SECOND YEAR FIRST SEMESTER EXAMINATION IN AGRICULTURE-2008

AEC 2101: APPLIED FARM MANAGEMENT (PRACTICAL)

Answer All questions

Time: 3 Hours

01. You are given the following information extracted from "ABC Farms" on 31.12.2007.

Item	Rupees
Total machine loan due	50,000
Total real estate loan due.....	120,000
Account payable	5000
Account receivable.....	6000
Grain in storage.....	20,800
Land value.....	250,000
Machine loan principle due in 12 month.....	10,000
Real estate loan principle due in 12 month.....	10,000
Cash in bank.....	18,000
Accrued interest payable.....	9000
Original machinery cost	110,000
Accumulated machinery depreciation.....	40,000
Original grain bin cost.....	20,000
Accumulated depreciation in grain bin.....	800

- Organize a Balance Sheet for the year ended at 31.12.2007.
- Analyze the liquidity using current ratio.
- Analyze the solvency and interpret the results.

(Contd. - 2)

02. a) Briefly discuss the causes of depreciation.

b) Assume that a new machine is purchased on January 1st for Rs.10,000 and given salvage value of Rs. 2000 for 10 years of useful life.

What would be the annual depreciation for the first 3 years under each depreciation method given below.

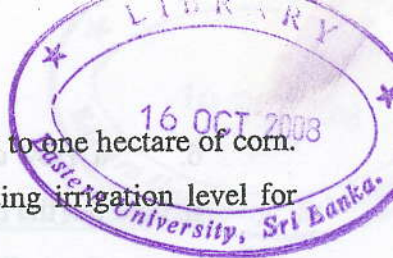
- i. Straight line method.
- ii. Sum- of-the year digit method.
- iii. Double declining balance method.

03. From one (01) acre grain enterprise farm the following information has been extracted.

Item	Unit	Quantity	Price (Rs)/unit
Seed	kg	46	326.00
Machinery interest	acre	1	10,600.00
Chemicals	acre	1	7,500.00
Oil and fuel	acre	1	9,500.00
Machinery repairs	acre	1	6,400.00
Grain yield	kg	600	240.00
Fertilizer	kg	90	216.60
Land charge	acre	1	50,000.00
Labors	hr	2	800.00
Interest	Rs	369.50	10%
Machinery depreciation	acre	1	14,200.00
Machinery taxes & insurance	acre	1	2,500.00
Miscellaneous overhead	acre	1	4,000.00

- a) You are required to find out Total Revenue, Gross Margin, Total Expenses, Profit and prepare the crop enterprise budget.
- b) Evaluate whether it is a profitable enterprise or not.
- c) Interpret and analyze the Enterprise Budget.

(Contd. 3 c)



4. A farm manager has to select the amount of water to apply to one hectare of corn. Fill in the following table and determine the profit maximizing irrigation level for corn production.

(Water at Rs 3 per ha- cm and corn at Rs 2.5 per kg)

Irrigation water (ha- cm)	Corn yield per ha (kg)	Marginal Physical Product (MPP)	Marginal Value Product (MVP)	Marginal Input Cost (MIC)	Marginal Revenue (MR)	Marginal Cost (MC)
10	104.0					
12	116.8					
14	128.6					
16	138.2					
18	144.8					
20	149.0					
22	151.8					
24	153.6					
26	154.2					

5. a. What are the assumptions of Linear Programming?
 b. A cattle feeder has provided the following data on capital availability and feed supply and wants to know if it is more profitable to feed calves, yearlings or some combination of two. Find out the most profitable combination.

Item available	Calves	Yearlings	Total supply
Net return	Rs 20	Rs 18	-
Feed requirement	101kg	69kg	20,000kg
Capital requirement	Rs 150	Rs 250	Rs 50,000

(Contd. 4)

