

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

# SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

## THIRD YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT 2018/2019 ACADEMIC YEAR

# REGULAR

COURSE CODE: AAE 3325

COURSE TITLE: FARMING AS A BUSINESS

EXAM VENUE:

**STREAM: BSC. Agribusiness** 

DATE:

EXAM SESSION:

TIME: 2 HOURS

**Instructions:** 

- 1. Answer ALL questions in section A and ANY other 2 Questions in section B
- 2. Candidates are advised not to write on question paper.
- **3.** Candidates must hand in their answer booklets to the invigilator while in the examination room.

## SECTION A

## [30 MARKS]

#### Answer ALL questions in this section

Q1. Use the following information to prepare an Enterprise Budget for the JOOUST Futuristic Cow/Calf enterprise. The budget is for one (1) Cow and contains a prorated share of the income from Steer and Heifer calves, and Cull cow.

Assume the Cow produced (2) Heifer-calves, and three (3) Steer-calves over the next 8 years. One (1) Heifer calf was retained to replace the cow while one (1) was sold at 450 Kg for 5/= per Kg as well as the three (3) Steer calves at 475 Kg for 360/= per Kg. The Cow was culled for KES 20,000/=. Expenses incurred over the production cycle include:

٢	Veterinary medicine	= 1600/=	Pasture maintenance	= 1450/=
٢	Interest on Livestock	= 500/=	Hired labour	= 2500
٢	Purchase of supplements	= 1250/=	Transport expenses	=1600/=
٢	Repairs on fence	= 1500/=	Depreciation expense	es=750/=
٢	Taxes paid	= 1500/=	Improved seeds	= 950/=
٢	Salt and minerals	= 1700/=	Land charges	= 4000/=
٢	Machinery expenses	=2650/=	Electricity expenses	=1300/=
٢	Rent	= 2600/=		

- Q1 a) Prepare an Enterprise Budget for the JOOUST Futuristic Dairy Farm. (20 Marks).
- Q1 b) What is the Income above Variable Expenses (IAVE) for the Enterprise. (2 Mark).
- Q1 c) What is the estimated profit for the Enterprise. (2 Marks).
- Q1 d) Compute the Breakeven price and yield for the Enterprise. (6 Marks).

#### **SECTION B**

#### [40 MARKS]

## Answer ANY TWO (2) questions in this section

**Q2.** An Agribusiness Firm had the following information in the Firm records for the month of May, 2014.

May	1	Started farm with capital in cash of KES 100,000/=			
.د	2	Bought goods on credit from the following persons: R.M. Mutinda KES 6,400/=; L.K. Wangechi KES 9,700/=; J.A. Odhiambo KES 3,500/=; E.O. Magero KES 8,600/=; and C.K. Sang KES 7,400/=.			
. د	4	Sold goods on credit to E.M. Mburia KES 5,300/=, J.A. Ojala KES7,200/=, and A.M. Mukatia KES 18,600/=.			
"	6	Paid land rent by cash KES 2,200/=.			
"	9	E.M. Mburia paid us his account by cheque KES 5,300/=.			
"	10	A.M. Mukatia paid us KES 15,000/= by cheque.			
.د	12	We paid the following by cheque: J.A. Odhiambo KES 3500/=; R. M. Mutinda KES 6,400/=.			
"	15	Paid transport by cash KES 3,300/=.			
"	18	Bought goods on credit from L.K. Wangechi KES 5,300/=; E.O. Magero KES 12,000/=.			
"	21	Sold goods on credit to J.A. Ojala KES 7,700/=.			
"	31	Paid land rent by cheque KES 2,800/=.			

- (a) Enter up the necessary accounts using your knowledge of the Double entry system for the month of May for the Albert Juma Multipurpose Farm. (10 Marks).
- (b) State and briefly explain the three (3) methods of inventory valuation. **{6 Marks).**
- (c) Briefly discuss the two (2) Accounting concepts often used as a basis for valuation purposes. (4 Marks).

Q3. Mr. Mukulima purchased a Farm Machinery on the  $1^{st}$  of April at KES 865550/= with a Salvage value of KES 25,000/= and a Useful life of 15 years. Using your knowledge of the Depreciation Schedule, calculate the following:

- a) The Annual Depreciation under the three (3) Mainstream depreciation methods for the first four (4) years. (12 Marks).
- b) The total depreciation under each of the above three (3) methods at the end of the 4<sup>th</sup> Year.
   (3 Marks).
- c) State and briefly explain four (4) causes of depreciation of assets. (4 Marks).

d) Identify and briefly explain the most appropriate depreciation method to use for the above Farm machinery. (1 Mark).

**Q4.** Use your knowledge of the Programme Planning technique and the table below to select enterprises for production purposes in the order of their returns to potentially scarce resources.

_	Available	Maize	Peanuts	Wheat
Resource	(Maximum)	(1 ha)	(1 ha)	(1 ha)
Land (ha)	820	1	1	1
Cropland (ha)	820	1	1	1
Wheat (ha)	50	-	-	1
Maize (ha)	170	1	-	-
Peanuts (ha)	210	-	1	-
March/April labour (hrs)	2000	1	2	5
August/Sept. labor (hrs)	1380	3	1	2
October/Nov. labor (hrs)	940	2	0	14
Gross margin		24,000/=	26,000/=	30,000/=

 Table1. Available Resources and Enterprise requirements

- (a) Which enterprise should be introduced first at the maximum level with August/September (summer) labor as the scarce resource? Illustrate your selection.
- (11 marks). (b) Compute the total Gross-margin after the selection and introduction of all the enterprises possible. (4 marks).
- (c) Define the following Business Account terminologies\*
  - Returns-outwards
  - Working capital ratio
  - Balance c/d
  - Double Entry system
  - Gross margin

\*@ 1 Mark each