MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations 2015/2016 Academic Year

SCHOOL OF AGRICULTURE AND NATURAL RESOURCES MANAGEMENT

DEPARTMENT OF AGRIBUSINESS MANAGEMENT

FIRST SEMESTER EXAMINATION FOR DEGREE IN
BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION
AND DEGREE IN EDUCATION

KBT 203: AGRICULTURAL PRODUCTION ECONOMICS

Date: **Time:**

INSTRUCTIONS:

Answer Question One And Two Other Questions

QUESTION ONE

a)   Define the following economic terms and concepts
   i)   Law of diminishing returns   (2 marks)
   ii)   Least cost combination   (2 marks)
   iii)   Sunk cost   (2 marks)
   iv)   Elasticity of production   (2 marks)
   v)   Marginal factor cost   (2 marks)

b)   Explain the dual relationship between production function and cost function.   (6 marks)

c)   Describe THREE types of isoquants as applied in production economics.   (6 marks)

d)   Describe FOUR contexts of the production environment that influence the production
        process.   (8 marks)

QUESTION TWO

a)   Explain FOUR impacts of technology on the production function.   (8 marks)

b)   i)   Explain SIX risks affecting agricultural and livestock production in Kenya
                                                                              (6 marks)
        (ii)   Explain SIX measures county and national governments could opt in to reduce
                vulnerability of mentioned risks.   (6 marks)

QUESTION THREE

a)   Explain the concept of production possibility frontier.   (2 marks)
b)   Explain THREE types of returns to scale in production.   (6 marks)
c)   Explain FOUR types of enterprises in relation to the shape of production function that
       underlie the product transformation functions.   (12 marks)

QUESTION FOUR

a)   Explain the difference between total cost and total factor cost.   (4 marks)
b)   Explain necessary and sufficient conditions in terms of a farmer seeking to maximize
       profits in agricultural production.   (6 marks)
c)   Suppose that the price of input Xin Ksh 6, while Total Fixed costs is Ksh400. Given the
       quantity of input (X) and output (Y) as below

Input (X)	Output (Y)
0	0
20	100
50	150
80	160
100	168

Evaluate
     i)   Total variable cost   (2 marks)
    ii)   Total cost   (2 marks)
   iii)   Marginal cost   (2 marks)
    iv)   Average variable cost   (2 marks)
     v)   Average cost   (2 marks)

QUESTION FIVE
a)   Explain the concept of expansion path.   (2 marks)
b)   Explain SIX factors that influence adoption of new technology by farmers.   (6 marks)
c)   Explain THREE stages of production highlighting the rational stage of production.
                                                                             (12 marks)