

Uva Wellassa University
Faculty of Animal Science and Export Agriculture
BSc in Export Agriculture
Bachelor of Animal Science
BSc in Tea Technology and Value Addition
BSc in Palm and Latex Technology and Value Addition



End Semester Examination – February/March 2014
Year I Semester II

Economic Thinking in Agriculture (EAG 121-3/0)

Instructions

Answer **All** questions

No. of questions : Two (02)
No. of pages : Six (06)
Time : One hour (1 hr)
Total marks allocated : 20/100

Index No:

Part II – Structured

1.
a. Given below is a total cost function of a firm;

$$TC = Q^3 - 12Q^2 + 60Q$$

Find

- i. Marginal Cost Function
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.....
- ii. Average Cost Function
.....
.....
- iii. Output level corresponding to minimum MC
.....
.....
- iv. Output level corresponding to minimum AC
.....
.....



- b. The following functions show the Total Revenue (TR) and Total Cost (TC) of a perfectly competitive firm

$$TR = 12Q$$

$$TC = 3 + 4Q + Q^2$$

Find

- i. Price of the output

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.....

- ii. Fixed Cost

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.....

- iii. Average Cost Function

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- iv. Marginal Cost Function

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- v. Profit maximizing output level

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- vi. Maximum profit of the firm

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2.

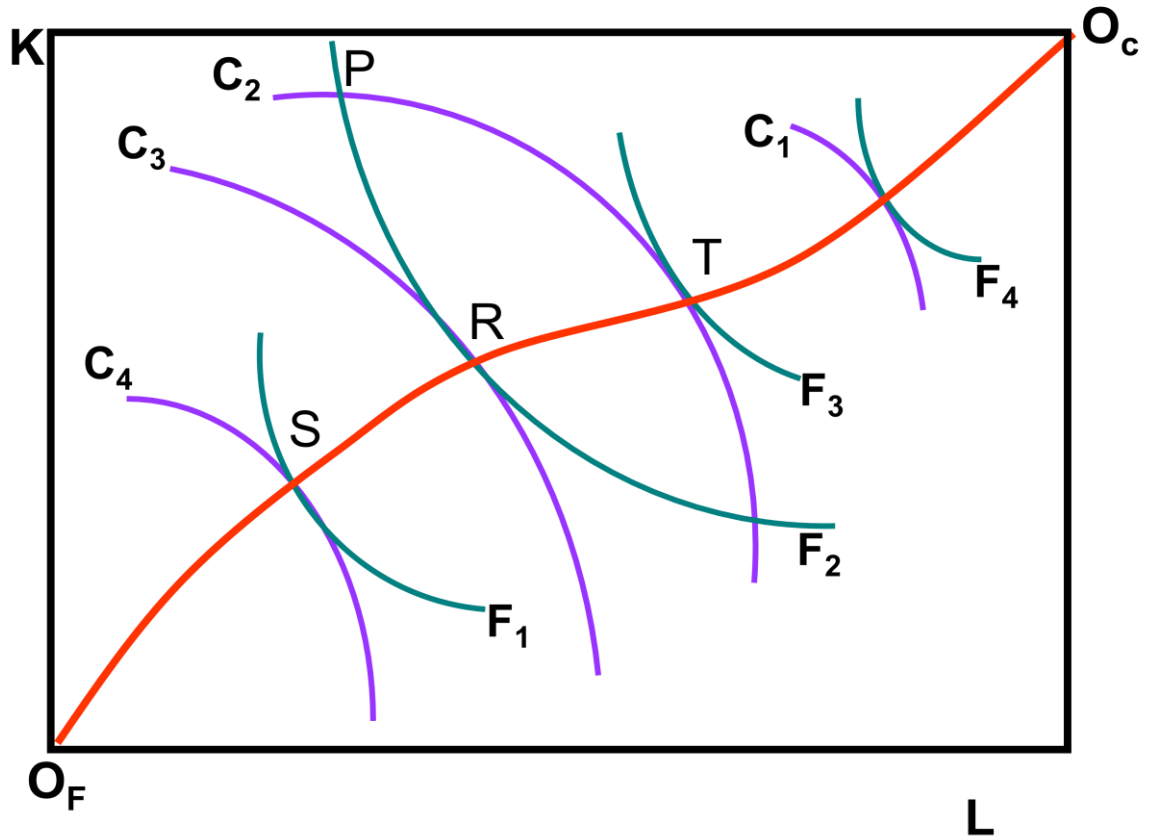
- a. What is meant by economic efficiency in Pareto Sense?

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- b. What are the 3 requirements to achieve Pareto optimality?

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- c. Given below is an Edgeworth-Bowley box diagram in production of cloth (C) and food (F) using Capital (K) and Labor (L) in an economy.



- i. What represents the dimensions of the Edgeworth-Bowley box?
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.....
- ii. What is $O_F O_C$ line called?
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.....
- iii. Name efficient and inefficient points in Production of two goods
Efficient point/ points
.....
.....
Inefficient point/ points
.....
.....

iv. Show those efficient and inefficient points in a production possibility frontier.

v. What conditions should fulfil to achieve efficiency in production?

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- vi. Draw an Edgeworth-Bowley box diagram to show the efficiency in exchange. Please note that you are required to label all the necessary information including the condition/ conditions to achieve efficiency in exchange

- d. State whether the following statements are **TRUE** or **FALSE** by putting a **tick (✓)** in the relevant cage

No.	Statement	TRUE	FALSE
01	In economics, an <i>equilibrium</i> is a situation in which: there is no inherent tendency to change, quantity demanded equals quantity supplied, and the market just clears.		
02	<i>Markets</i> can be thought of as self-adjusting mechanisms; they automatically adjust to any change that affects the behaviour of buyers and sellers. An important requirement is that prices must be free to move in response to the <u>interplay of supply and demand</u> .		
03	<i>Excess supply</i> exists when, at the current price, the quantity demanded is greater than the quantity supplied.		
04	<i>Availability of substitutes</i> is one of the major factors affecting demand		
05	An individual can, of course, choose any bundle of the two goods on or above the budget constraint.		
06	<i>Production function</i> gives a mathematical relationship on Quantity of output of a particular product that can be		
07	The <i>efficiency of variable inputs</i> increases and the efficiency of <i>fixed inputs</i> decline through out all stages of the production		
08	<i>Many sellers and buyers</i> is one of the assumptions in monopolistic competition		
09	<i>Monopoly</i> produces a quantity of output that is too large in comparison to the quantity of output produced in perfect competition		
10	<i>The short run supply curve</i> of a perfectly competitive firm is that the portion of the firm's marginal cost curve that lies above the average total cost curve		