



FACULTY OF MANAGEMENT AND ADMINISTRATION

COURSE TITLE: MEC101 ECONOMIC PRINCIPLES 1

SEMESTER 1: FINAL EXAMINATION Nov/Dec 2013

LECTURER: MR G. MANDEWO

TIME: 3 HOURS

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***INSTRUCTIONS***

Answer **ALL** questions in Section A. Answer **ANY TWO** questions in **Section B**. Total possible mark is **100**.

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Start **each** question on a new page in your answer booklet.

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The marks allocated to **each** question are shown at the end of the question.

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**Show all your workings.**

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Credit will be awarded for logical, systematic and neat presentations.

## SECTION A (Answer All Questions in this Section)

### Question 1

- (a) The Monthly demand for diabetes tablets is known to be perfectly inelastic and the demand for air time in Mbare is perfectly elastic. If the elasticity of diabetic tablets is zero and that of airtime is undefined (infinite) With an aid of a diagram(s) explain what the statements means and justify the proposed elasticities. **[4 marks]**
- (b) Mavende high head is considering increasing school fees by 15%. Some of his administrative officers are arguing that this may not be the right solution to increase revenues because the elasticity of demand is too low only -0.01 Comment on this statement and justify or refute the claim by the officers. **[4 marks]**
- (c) Chenje is a known cross boarder vendor. She observed that the demand for white slacks was dependent on the demand for black slacks. She increased the price of white slacks from \$10 to \$15 the demand for black slacks rose from 80 to 125. Calculate, classify, interpret, illustrate and infer the relevant elasticity. **[4 marks]**
- (d) Mr Maengahama is an illegal dealer of illicit brands of beer. If the income elasticity of demand is -4.0 is he going to profit from the recently announced 5% income increase in Salaries in both the private and the public sector or not/ **(justify your response) [4 marks]**

### Question 2

- (a) *'To get one thing that we like, we usually have to give up another thing that we like'.* What economic concept that the above statement is alluding to and show the concept in the context of a diagram. **[4 marks]**
- (b) The Production Possibility Frontier captures the concept of choice and scarcity. Illustrate and explain how this is achieved. **[4 marks]**
- (c) A demand function shows the quantities of a product that will be demanded at various possible prices, *ceteris paribus*. Given a schedule on prices and quantities below, illustrate the demand curve and show how the above statement is true. **[4 marks]**

Quantity Demanded	25	20	15	10	5
Price of the good	1	3	5	7	10

- (d) What is the law of demand? **[4 marks]**
- (e) What are the goals of economics? **[4 marks]**

(f) A market consists of two people A and B. The total supply of goods in the market is 150 units. If the demand functions for the two are given by the following equations

A:  $Q=200-0.75P$

B:  $Q=100-1.25P$

- i. Determine the market demand for this product[**4 marks**]
- ii. At what price will the product be sold. [**4 marks**]
- iii. How many units will each individual buy? [**4 marks**]

(g) Consider the market of tomatoes in equilibrium. What is the effect of the following factors on equilibrium price and output?

- i. An increase in income tax[**4 marks**]

- iii. A simultaneous increase in supply and decrease in demand[**4 marks**]

(h) The quantity demanded of a product is given by  $Q_d = 40 - 2P$

And the quantity supplied is given by  $Q_s = 10 + P$

Determine equilibrium price and quantity. [**4 marks**]

## SECTION B

### Question 4

- (a) In long-run equilibrium,  $P = MC = AC$  for the perfectly competitive firm. Explain the significance of this equality for both productive and allocative efficiency. Illustrate your answer with a diagram of the perfectly competitive firm. [**5 marks**]
- (b) Compare the demand curve of the monopolist with that of the perfectly competitive firm. Give a full explanation for the difference between the two curves. Illustrate your answer with the appropriate diagrams. [**5 marks**]
- (c) Illustrate long run equilibrium for a firm in a perfectly competitive market. [**5 marks**]
- (d) 'A competitive producer must always look to average variable cost in determining whether to produce or not in the short run, to marginal cost in determining the best volume or production and to average total cost to calculate profits or losses.' Explain this statement using clearly labeled diagrams. [**5 marks**]

### Question 5

- (a) Stating your assumptions clearly, illustrate a budget line and an indifference curve. **[5 marks]**
- (b) What are the properties of an indifference curve? **[5 marks]**
- (c) Use diagrams to explain how a demand curve for a product is derived using indifference curves and budget lines. **[5 marks]**
- (d) Explain how the indifference curve approach can be used to determine the optimal combination of goods. **[5 marks]**

### Question 6

- a) Define price discrimination? What are the conditions necessary for price discrimination? **[5 marks]**
- b) What are the main differences between a monopoly equilibrium and the perfectly competitive equilibrium? **[5 marks]**
- c) Explain why a monopoly can influence the market price of its product and why a competitive firm cannot do so? **[3 marks]**
- d) What is a pure monopoly? What is natural monopoly? When is a firm said to have monopoly power? **[5 marks]**

### Question 7

- (a) What is the difference between substitution effect and income effect? **[5 marks]**
- (b) Illustrate the concept of the law of diminishing marginal returns **[5 marks]**
- (c) Consider the table below

	Total Utility of Mangoes	Total Utility Of Peaches	Total Utility of Oranges
1	30	80	120
2	42	86	140
3	50	91	168
4	56	95	183
5	61	98	192
6	64	98	193
7	63	93	189

- i. In the contexts of the fruits in the diagram above, deduce the utility optimizing rule. [**3 marks**]
- ii. Given that the price of mangoes is \$0.50, Price of peaches is \$1.00 and price of oranges is 1.50 determine the optimal units of each fruit[**2 marks**]
- iii. What is the total budget one needs to buy these fruits? [**3 marks**]
- iv. What is the total level of satisfaction achieved? [**2 marks**]

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