



**BUSINESS STUDIES DIVISION (BSD)**

**BoBA1010: INTRODUCTION TO MICROECONOMICS**

**JUNE/JULY 2021 EXAMINATION**

**DATE : 02<sup>nd</sup> JULY 2021**

**SESSION : 13:30 – 17:00**

**VENUE : LIBRARY SECOND FLOOR**

**DURATION: THREE (3) HOURS**

**INSTRUCTIONS TO CANDIDATE:**

1. This paper contains **SEVEN** questions.
2. Attempt **ANY FIVE** questions
3. Use of calculators is allowed
4. Number each answer clearly in the left margin.
5. Start each answer on a new page.
6. Total marks: 100.

**DO NOT TURN THIS PAPER UNTIL TOLD TO DO SO  
PLEASE LEAVE THE ANSWER SCRIPT BEHIND  
AFTER THE EXAMINATION**

**QUESTION ONE: (20 marks)**

a). Briefly explain how each of the following events would affect ATC, AVC, and MC of a company?

i. An increase in the cost of the lease of the firm's building. [3]

ii. A reduction in the price of electricity. [3]

iii. A reduction in wages. [3]

iv. A change in the salary of the president of the company. [3]

v. How would an increase in output affect the FC of this company? [3]

b). If profit is equal to total revenue minus total cost, then how do we derive the equation:  $Profit = (P - ATC)Q$ ? Show your work. (5marks)

**QUESTION TWO: (20 marks)**

The demand and supply schedules for good X are given in the table below.

Price of x (K)	Quantity demanded	Quantity supplied
1	120	0
2	100	20
3	80	40
4	60	60
5	40	80
6	20	100

a) Using the information above, what can you deduce about the relationship between price and quantity demanded? Would you expect such a relationship to always hold in practice? Explain.[4]

b) What is the equilibrium price and quantity? [2]

c) What would be the excess demand or supply if the price were:(i) K2(ii) K6? [4]

d) If there was an increase in income and the product was an inferior good what would be the new equilibrium price and quantity if 20 units less were demanded at each and every price? [4]

e) Using the original table, calculate the price elasticity of demand when the price increases from K5 to K4? [4]

f) Based on your answer in (e) predict the effect of a price reduction from K5 to K4 on the total revenue? [2]

**QUESTION THREE (20 marks)**

(a). Chilizani Phiri can plant 30 trees or make 10 tables in a day while Edward Mwanza can plant 20 trees or make 4 tables.

i) What is Chilizani's opportunity cost of planting a tree per day? [3]

ii) What is Chilizani's opportunity cost of making a table per day? [3]

iii) What is Edward's opportunity cost of planting a tree per day? [3]

iv) What is Edwards's opportunity cost of making a table per day? [3]

v) Based on your responses above, If Chilizani and Edward were allowed to exchange their products, who would you advise to plant trees and who would you advise to make tables? [4]

(b). Explain how the concepts of scarcity, choice and opportunity cost are related? And how this affects decision making [4]

**QUESTION FOUR (20 marks)**

(a) The table below is given as follows:-

Variable factor (in units)	1	2	3	4
Marginal product	6	10	15	12

You are required to calculate the following for every unit of the variable factor:

(i) Total product [4]

(ii) Average product [4]

(b) Distinguish between fixed and variable costs, and give two examples of each. [4]

c) Based on your answers to (a), how does an increase in a variable factor affect the total product? [4]

(d). Based on your answers to (a), how are marginal product and average product related?[4]

**QUESTION FIVE: (20 marks)**

- (a) Trade Kings expects to have revenue of K20, 000 when it sells its Maheu for K5 per 500ml. A fall in cost of Production results in a New Price of K4 per 500ml of Maheu. Trade Kings total revenue is Now K30, 000. Calculate the Price elasticity of demand over this price range. (6marks)
- (b) Suppose that a further reduction in price to K3 brings revenue to K33, 000
- (i) What is the price elasticity of demand over this price range? (4marks)
- (ii) What conclusions can you draw from the answers you have given? (6marks)
- (c) If the revenue had not altered after the price change from K4 to K3 what then would be the price elasticity of demand? (4marks)

**QUESTION SIX:(20 marks)**

RATE OF OUTPUT	FIXED COST	VARIABLE COST	TOTAL COST	MARGINAL COST	AVERAGE FIXED COST	AVERAGE VARIABLE COST	AVERAGE TOTAL COST
0	50	0	50				
1	50	50	100	50	50.0	50.0	100.0
2	50	78	128	28	25.0	39.0	64.0
3	50	98	148	20	16.7	32.7	49.3
4	50	112	162	14	12.5	28.0	40.5
5	50	130	180	18	10.0	26.0	36.0
6	50	150	200	20	8.3	25.0	33.3
7	50	175	225	25	7.1	25.0	32.1
8	50	204	254	29	6.3	25.5	31.8
9	50	242	292	38	5.6	26.9	32.4
10	50	300	350	58	5.0	30.0	35.0
11	50	385	435	85	4.5	35.0	39.5

- (a). What happens to the firm's total output choice and profit when the price falls from K60 to K24. [4]
- (b). Given that the price is at K60, what happens to the firm's output choice and profit when variable costs of production increases by k20 at each point? [6]
- (c). What general conclusion can you make concerning the effects of variable costs on the firm's output choice? [4]
- (d). What happens to the firm's output choice and profit when fixed costs of production increases from K50 to K90, and then to K140. What general conclusion can you make concerning the effects of fixed costs on the firm's output choice? [6]

**QUESTION SEVEN: (20 marks)**

a) Current statistics show that over 60 percent of students at the National Institute of Public Administration are under the age of 30 years. Use economic reasoning to explain why this is the case. (10 marks)

b) Zim Police warns dubious traders. HARARE—“The Zimbabwean police warned last Monday unscrupulous traders selling commodities at above the government stipulated prices that they risked being arrested if caught doing the unlawful act. Police spokesperson Inspector, Cecilia Churu, said that police would not hesitate to arrest any retailer caught flouting the gazetted price. The warning comes in the wake of unjustified price increases of Mealie Meal in the past two weeks by millers without the approval of the government.” Zambia Daily Mail, 24th July, 2003.

You are required to explain in detail the effect of this form of government intervention on the price mechanism. (10 Marks)