

COURSE: PRINCIPLES OF MICROECONOMICS
COURSE CODE: PMI511S
TUTORIAL LETTER: 02/2023
DATE: May 2023

Dear Student

It is nearly the end of the first semester and I trust that you have so far gained a wealth of knowledge and information on economics.

This tutorial letter is to give feedback on Assignment 2 of Principles of Microeconomics. Assure yourself of all the correct answers and pay attention to the remarks of the marker-tutor. Feel free to call us if you need assistance.

Use the time that you have available up to the end of the semester to do revision and prepare yourself for examination.!

Regards,

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Principles of Microeconomics PMI511S 2023

ASSIGNMENT 2

SECTION A

1. d
2. c
3. a
4. b
5. c
6. a
7. b
8. d
9. a
10. c
11. d
12. b
13. d
14. a
15. c
16. d
17. a
18. b
19. c
20. d

SECTION B

QUESTION 1 [10 marks]

Faith enjoys classical CDs and travel books and spends N\$75 a month on them. Table 2 shows the utility she gets from each good.

Table 2 Utility schedule

Classical CDs: Price = N\$15			Travel books: Price = N\$15			
Total utility classical CDS	Marginal utility classical CDs	MU/P classical CDs	Quantity per month	Total utility travel books	Marginal utility travel books	MU/P travel books
0	-	-	0	0	-	-
90	90	6	1	120	120	8
110	20	1.3	2	136	16	1.07
126	16	1.07	3	148	12	0.8
138	12	0.8	4	152	4	0.27

- (a) **Answers printed in bold on Table 2. Pay attention to the rounding off: 1.066666 should become 1.07 (or 1.1) and 0.2666666 should become 0.27 (or 0.3). The MU should be divided by the price and NOT the budget.** (0.5 x 16 = 8)
- (b) If the price of a classical CD is **N\$15 each** and the price of a travel book is **N\$15 each**, how does Faith spend the N\$75 every month? There are two possibilities, but she can only afford the combination where she spends N\$75.

Weighted MU 1.07:

3 CDs x 15 = N\$45

2 Books x 15 = N\$30

N\$75

Weighted MU 0.8:

4 CDs x 15 = N\$60

3 Books x 15 = N\$45

N\$105

Martha will buy 3 CDs and 2 travel books every month (weighted MU – 1.07).

$(0.5 \times 2 = 1)$

- (c) If you study the two marginal utility columns, what do they tell you about Faith's preferences for the two goods?

Those two columns indicate what happens to the marginal utility. As Martha consumes more and more CDs and travel books, her marginal utility diminishes (the law of diminishing marginal utility). (1)

QUESTION 2 [6 marks]

Table 3 Total, Average and Marginal Product

Units of capital	Units of labour	Total product	Average product	Marginal product
2	0	0	-	-
2	1	16	16	16
2	2	44	22	28
2	3	66	22	22
2	4	82	20.5	16

- (a) **Answers printed in bold on Table 3.** (0.5 x 8 = 4)

- (b) At which level of employment of labour will diminishing marginal returns set in?

Diminishing marginal returns set in with the 3rd worker. (1)

- (c) Is this company looking at the short or long run? Provide a reason for your answer.

Short run – capital is fixed while labour is variable. (2 x 0.5 = 1)

QUESTION 3 [14 marks]

Pat's Pizza Kitchen is a price taker and sells its pizzas at **N\$22** each. Its costs are shown in Table 4.

Table 4 Cost schedule for producing pizzas

Quantity of Pizzas	Total fixed cost (TFC) N\$	Total variable cost (TVC) N\$	Total cost (TC) N\$	Marginal cost (MC) N\$
0	14	0	14	-
1	14	24	38	24
2	14	34	48	10
3	14	48	62	14
4	14	66	80	18
5	14	88	102	22

- (a) **Answers printed in bold on Table 4.** (12)
- (b) How many pizzas should Pat produce to maximise profits? Provide a reason for your answer.
Pat should produce 5 pizzas where $MR/P = MC$. If you are not familiar with the profit maximising rule please note that it is explained in Unit 8. (2)

TOTAL FOR SECTION B: 30 MARKS

TOTAL FOR ASSIGNMENT 2: 50 MARKS