COLLEGE OF BUSINESS AND MANAGEMENT SCIENCES

NMEC 401: MANAGERIAL ECONOMICS
END OF SEMESTER EXAMINATIONS
NOVEMBER 2024
LECTURER: MR G. MANDEWO
TIME: 3 HOURS

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INSTRUCTIONS

1. This paper contains **Six** questions.

2. Answer **Four** questions.

3. Start each question on a new page.

1. (a) Evaluate the statement. "The reason monopolists always make excessive profits is that they face a nearly perfectly inelastic demand curve and are thus able to charge an excessively high price" **[5 marks]**

(b) Moral hazard concept emanates from the fact that buyers and sellers have different sets of information in terms of product quality, interoperability, durability and design. State whether this statement is TRUE/FALSE/UNCERTAIN. Justify your response. **[5 marks]**

(c) It is better to hang rather than fall. This seems to be the message from the MAXMIN strategy. Demonstrate using a business payoff matrix. **[5 marks]**

(d) Relate the prisoners' dilemma concept to business. **[10 marks]**

2. (a) Massinda Pvt. Ltd and Anesu Inc. are the only two companies in the taxi business in Chimoio town. The two companies decided to collude and charge the same fare. Anesu cheated in the initial round, using a tit-for-tat strategy deduce the outcome of this game **[5 marks]**

(b) Demonstrate two methods you would use to determine the optimal labour input and optimal capital input given a Cobb Douglas production function of the form $Q = 180L^{0.25}K^{0.75}$ And that the wage rate is $4 per hour and the price of the machine is $1 per hour. The Total cost is $10 000.00 **[5 marks]**

(b) Yazmin Inc. sells bottles of coffee to professors who stay up all night to write notes. Yazmin has identified the 5 people willing to pay the most for the coffee, and the firm knows exactly the maximum price that each is willing to pay per bottle. Here they are:

> **Remember: $50 for a bottle**
> **Anesu: $49 for a bottle**
> **Maenda: $48 for a bottle**
> **Tafadzwa: $47 for a bottle**
> **Chimwanda: $46 for a bottle**

i. Explore the concept of consumer surplus **[2 marks]**

ii. Contrast the above example with second degree and third degree price discrimination **[3 marks]**

iii. If products in question are jointly produced goods (such as Petrol and diesel) demonstrate how you would price such goods **[5 marks]**

(c) 'Marginal Cost (MC) is the cost of expansion,' Is this statement TRUE/FALSE/UNCERTAIN, justify your answer. **[5 marks]**

3. (a) In cost theory, the Marginal Cost intersects the Average Cost at the minimum point of the average cost. Illustrate and justify. **[5 marks]**

(b) Total Revenue is equal to price times quantity, algebraically show a direct relationship between Total revenues and elasticity. **[5 marks]**

(c) Explicitly demonstrate the problems that arise because of information asymmetry. **[5 marks]**

(d) What do you understand by the term post-contractual opportunistic behaviors? **[5 marks]**

(e) What are the best practices to minimize post-contractual opportunistic behaviors? **[5 marks]**

4. (a) Explain with a concrete example how moral Hazard and adverse selection are critical issues emanating from information asymmetry between the seller and the buyer.　　　　**[5 marks]**

(b) The demand curve depicts the behavior of consumers, explain and illustrate the meaning of this statement appealing to elasticity. **[5 marks]**

(c) Mr Kuchera, a known retailer in the food industry discovered that the cross elasticity of demand between commodity A and B is -1.24 and the Income elasticity of demand for commodity A is 4.5 and that of commodity B is -0.8 Explaining yourself clearly suggest practical decisions that Mr Kuchera should make that will foster the optimal profit for the firm. **[5 marks]**

(d)Explain the circumstances that may render monopoly production the only sustainable option. **[5 marks]**

(e) What are the difference in prediction about outcomes of non-cooperative games and repeated games? **[5 marks]**

5. (a) Illustrate and explain long run profit maximization for a perfectly competitive firm and a monopoly. **[5 marks]**

(b) Under what circumstances should you defend pure competition as the most efficient market structure? **[5 marks]**

(c) In an attempt to increase revenue and profits, a firm is considering 4 percent increase in price and an 11 percent increase in advertising. If the price elasticity of demand is -1.5 and the advertising elasticity of demand is +0.6, would you expect an increase or decrease in total revenues? **[5 marks]**

(b) Given that the total product is given by $100 - Q^2$. What is the rate of output that will maximize the Total Product? **[5 marks]**

(c) I overhead Mr Anesu remarking that all points on the demand function have different elasticities. Given a demand function of the form
Q = 24-5.6P

Demonstrate the authenticity of Anesu' statement using two price levels, that is, 2 and 3 **[5 marks]**

6. (a) Discuss, explain, and illustrate the following concept in information economics

(i) Information asymmetry **[5 marks]**

(ii) Adverse selection **[5 marks]**

(iii) Moral hazard **[10 marks]**

(b) A demand function for bananas was estimated by an Economics graduate and the following function represents the findings;
$$Q = 60 - 0.5P + 1.08Y - 0.02P_0$$
$R^2 = 0.97$
Adjusted $R^2 = 0.956$
Where P is the average price of a bunch of bananas
Y is the average income of consumers
P is the price of other goods
You are required to give a comprehensive interpretation of the information given. **[5 marks]**

END OF EXAMINATION