

UNIVERSITI SAINS MALAYSIA

Final Examination  
Semester 1, Academic Session 1999/2000

September/October 1999

AGW614 - MANAGERIAL ECONOMICS

Time: [3 hours]

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**INSTRUCTIONS**

Please make sure that this examination paper consists of **FOUR (4)** printed pages before you begin.

Please answer any **FIVE (5)** questions.

**Question 1**

- a) Over the last several years, the demand for compact discs (CDs) has dramatically increased. What are some of the causes of this increase in demand? According to supply-and-demand theory, price should rise when demand increases. However, in recent years the average price of a CD has actually fallen. Explain this apparent contradiction between the theory and fact.  
[5 marks]
- b) Distinguish between perfectly competitive and monopolistically competitive markets.  
[5 marks]
- c) A local supermarket lowers the price of its frozen burgers from RM3.50 per packet to RM3.00. Unit sales of burgers increases by 20 percent. The store manager notices that the unit sales of buns increases by 10 percent.
- i) What is the price elasticity coefficient of frozen burgers?
- ii) Why have the sales of buns increased, and how would you measure the effect?
- iii) Overall, do you think that the new pricing policy was beneficial for the supermarket?

[10 marks]

...2/-

**Question 2**

- a) What is meant by market segmentation or price discrimination? Where a firm is selling in two separate markets, what condition(s) must be fulfilled in order to maximize the firm's profit?

[8 marks]

- b) Jamal's Instant Chendol shops have enjoyed rapid growth in the northern region in recent years. From the analysis of Jamal's various outlets, it was found that the demand curve follows this pattern:

$$Q = 200 - 300P + 120I + 65T - 250A_c + 400A_j$$

where  $Q$  = Number of bowls served per week

$P$  = Average price paid for each bowl

$I$  = Per capita income in the given market (thousands)

$T$  = Average outdoor temperature

$A_c$  = Competition's monthly advertising expenditures (thousands)

$A_j$  = Jamal's own monthly advertising expenditures (thousands)

One of the outlets has the following conditions:  $P = 1.50$ ,  $I = 10$ ,  $T = 30$ ,  $A_c = 15$  and  $A_j = 10$ .

- i) Estimate the number of bowls served per week by this outlet. Also determine the outlet's demand curve.
- ii) What would be the effect of a RM5,000 increase in the competitor's advertising expenditure? Illustrate the effect on the outlet's demand curve.
- iii) What would Jamal's advertising expenditure have to be to counteract this effect?

[12 marks]

**Question 3**

- a) Briefly discuss the effect that each of the following conditions will have on a firm's average variable cost curve and its average cost curve.

- i) The movement of a brokerage firm's *administrative offices* from Beach Street in Georgetown to Gelugor, where the average rental cost is lower.
- ii) The use of two shifts instead of three shifts in a manufacturing facility.
- iii) An agreement reached with the trade union in which wage increases are tied to productivity increases.
- iv) Imposition of stricter environmental protection laws.

[8 marks]

...3/-

- b) The owner of a car wash is trying to decide on the number of people to employ based on the following short-run production function:

$$Q = 6L - 0.5L^2$$

where  $Q$  = Number of car washes per hour and  
 $L$  = Number of workers.

- i) Prepare a schedule showing total product, average product, and marginal product.
- ii) Suppose the price of a basic car wash in Penang is RM5. How many people should he hire if he pays each worker RM6 per hour?
- iii) Suppose he considers hiring USM students on a part-time basis for RM4 per hour. Do you think he should hire more workers at this lower rate? Explain.

[12 marks]

#### Question 4

- a) Why do oligopolists prefer non-price to price competition?  
[4 marks]
- b) Discuss the positive and negative welfare effects associated with a monopoly.  
[6 marks]
- b) Aqua Corporation is the largest producer of swimming pool electronic control valves in the United States. The market demand for its product is estimated to be

$$Q_M = 81000 - 200P,$$

and it expects small firms in the industry to supply output according to the following function:

$$Q_S = 1000 + 50P.$$

Aqua's marginal cost function is

$$MC_A = 100 + 0.014Q_A.$$

- i) What price will Aqua set?
- ii) How many units will the large firm sell?
- iii) What quantity will the small firms sell?

[10 marks]

...4/-

**Question 5**

Comment on any **five** of the following statements:

- a) Real per capita GDP is a good measure of economic welfare.
- b) Restrictive fiscal policy will always lower output, prices, and interest rates.
- c) Expansionary fiscal policy is more effective when it is financed by borrowing from the public than when it is monetised.
- d) A decrease in money supply will lead to an increase in the budget deficit.
- e) A tax cut will increase national income and therefore always lower the budget deficit.
- f) Privatisation is always beneficial to the national economy.

[20 marks]

**Question 6**

The Malaysian economy, together with many other South East Asian economies, has been severely affected by the Asian financial crisis.

- a) Discuss the main causes and consequences of the Asian financial crisis with special reference to Malaysia.
- b) Evaluate the policy response of the Malaysian government in handling the economic and financial crisis.

[20 marks]

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