

UNIVERSITI SAINS MALAYSIA
Master of Business Administration

First Semester Examination
Academic Session 1998/99

August/September 1998

AGW 614 - MANAGERIAL ECONOMICS

Time: [3 hours]

INSTRUCTIONS:

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

Answer **ALL** questions.

1. State, giving reasons, whether the following statements are true, false or uncertain (choose any **SEVEN**).
 - (a) All firms aim at maximum profit.
 - (b) While social justice demands taxes on luxury goods, revenue collection favours those on necessary goods.
 - (c) Law of diminishing returns is same as the diminishing returns to scale.
 - (d) Economies of scope arise due to learning curve.
 - (e) Monopoly is a social evil.
 - (f) Telekom Malaysia is a price discriminator.
 - (g) Cost plus pricing is inconsistent with optimal pricing.
 - (h) Economic prosperity is synonymous with human development.
 - (i) GDP deflator is an ideal measure of the cost of living index.
 - (j) Devaluation is a reliable instrument for correcting current account deficits.
 - (k) Stagflation of Seventies triggered the re-emergence of the supply side economics.

(28 marks)

.../2

2. Intimate Lighting Berhad (ILB) operates 18 stores in various cities. An in-house study of sales by these stores gave the following results:

$$Q = 2,500 - 40P + 20P_C + 2A + 0.5I$$

(20) (15) (1.3) (0.02)

$$R^2 = 0.86, \text{ SEE} = 500$$

where Q = unit sales, P = unit (own) price, P_C = unit price at competitor stores, A = advertising expenditure, and I = income per household. (Numbers in parentheses are the corresponding standard errors.)

- (a) Which variables are the significant determinants of the company's sales? why?
- (b) Is the company's product a Giffen good? A superior good?
- (c) Penang is a typical market covered by ILB. In this market, the current values of the variables are:
 $P = \text{RM}60$, $P_C = \text{RM}45$, $A = \text{RM}13,500$ and $I = \text{RM}40,000$.
 Determine the current level of demand in Penang. What is the 95% confidence interval for actual sales?
- (d) Should ILB consider discounting its price in Penang to increase its market share? Should it worry about price discounting by its competitors?
- (e) If ILB's total costs in Penang were RM1,735,200, what is the chance that the company would end up making a profit?
- (f) If ILB desires to have a sales of 32,000 units in Penang, suggest two alternative strategies available to it.

(18 marks)

3. Use the production matrix below to answer the following questions:

Capital Labour	1	2	3	4	5	6	7	8
1	3	6	12	17	23	27	30	31
2	7	14	25	34	45	54	62	67
3	11	24	38	54	69	82	93	101
4	17	33	54	72	91	108	122	133
5	27	44	65	89	108	130	147	161
6	19	54	74	101	126	149	168	184
7	16	47	79	108	137	168	184	202
8	8	43	79	111	142	163	193	213

.../3

The price of labour (L) is RM 10, of capital (K) is RM20, and of the product is RM0.50.

- (a) Suppose the firm has 6 units of capital. If it aims at profit maximisation (loss minimisation), how many units of output it must produce? Which of the three stages of production, this profit-maximising output falls? Is the firm making a profit or loss?
- (b) Draw an iso-quant for output = 108. Does its shape confirm to the production theory?
- (c) Suppose the firm has a budget of RM100. Determine its optimal combination of labour and capital, and the corresponding production level.
- (d) Using the duality principle, derive the total cost, average cost and marginal cost schedules. Are there economies of scale?

(18 marks)

4. A group of five students have decided to form a company to publish a guide to eating establishments located in the vicinity of all major college and university campuses in the state. In planning for an initial publication of 6,000 copies, they estimated the cost of producing this book to be as follows:

Paper	RM12,000
Research	2,000
Graphics	5,000
Reproduction services	8,000
Personal computer	4,000
Desktop publishing software	500
Overhead	3,500
Binding	3,000
Shipping	2,000
Miscellaneous	5,000

By engaging in this business, the students would have to give up their summer jobs, which would otherwise earn RM4,000 per student. However, they felt that they could keep expenses down by doing research for the book by themselves with no immediate compensation.

The students decided to set the retail price of the book at RM 12.50 per copy. Allowing for the 20% discount that retail stores in their state generally required, the students expected a per unit revenue of RM10. The manager of the campus bookstore advised them that their retail price was far too high, and that a price of about RM8.75 would be more reasonable.

.../4

They collected time series data on sales (Q) and retail prices (P) of similar books and estimated the demand function as follows:

$$Q = 18,500 - 1,000 P$$

$$R^2 = 0.90$$

Based on the above case, answer the following questions:

- (a) Construct a numerical table for the demand curve for retail prices 12.50, 12.00, 11.50,....., 8.50 and 8.00.
- (b) Compute the optimal (profit-maximising) price of the book. (Hint: divide the costs into fixed and variable and note that marginal cost = average variable cost = constant).
- (c) Is the book manager's advice sound? If not, why could he have given such an advice?
- (d) Assuming that the students decide to charge the optimal price, do you think that they should proceed with this venture? Explain.

(18 marks)

5. Attempt any **TWO** of the following questions.

- (a) Define GNP. What factors determine its magnitude? How can monetary and fiscal policies be used to regulate its level?
- (b) Discuss the current state and performance of the Malaysian economy vis-a-vis the largest economy (USA) in the world (give the relevant data). Offer suggestions to deal with the current economic slowdown.
- (c) Price under oligopoly is rigid and often indeterminate. Explain.

(9 marks)

(9 marks)

(9 marks)