

# 國立嘉義大學 99 學年度

## 行銷與運籌研究所碩士班(乙組)招生考試試題

### 科目：經濟學

1. Explain the meaning of Economies of Scale and give an example. (5 分)  
 Explain the meaning of Economies of Scope and give an example. (5 分)  
 Explain the meaning of Monopolistic Competition and give an example.(5 分)  
 Explain the meaning of Marginal Pricing Method and give an example. (5 分)  
 Explain the meaning of Price Discrimination and give an example. (5 分)
2. Suppose a shoe company has \$30 of fixed costs, \$40 of trading costs per shoe, and labor costs of  $0.5Q^2$ , Q is the number of shoes produced. Total costs are defined as  $TC = 30 + 40Q + (1/2)Q^2$ . Also the demand function is  $Q = 25 - (1/3)P$   
 What is the maximum profit? (5 分)  
 What is the quantity which maximizes profits? (5 分)  
 What is the price at the maximum profits? (5 分)  
 What is the price elasticity at the maximum profits? (5 分)  
 What is the price elasticity if demand Q reduces by 10% and the price P increases by 20%? (5 分)
3. David enjoys rock concerts and the opera. The table shows the utility he gets from each goods.

Number per month	Utility from rock concerts	Utility from operas
1	60	20
2	110	38
3	150	53
4	180	64
5	200	70
6	206	75

- (1) Draw graphs showing David's utility from rock concerts and from opera. (5 分)
- (2) Compare the two utility graphs. Can you say anything about David's preferences? (5 分)
- (3) Draw graphs that show David's marginal utility from rock concerts and from opera. (5 分)
- (4) What do the two marginal utility graphs tell you about David's preferences? (5 分)

- (5) If David has \$70 a month to spend on concerts. The price of a rock concerts ticket is \$10, and the price of an opera ticket is \$20. How many rock concerts and how many opera does David attend? (5 分)

4. There are 1,000 firms in the CD industry. The market demand schedule for CD is:

Price (dollars per CD)	Quantity demanded (thousands of CD per week)
3.65	500
5.20	450
6.80	400
8.40	350
10.00	300
11.60	250
13.20	200
14.80	150

The market is perfectly competitive, and each firm has the following cost structure:

Output (CD per week)	Marginal cost (dollars per additional CD)	Average variable cost (dollars per CD)	Average total cost (dollars per CD)
150	6.00	8.80	15.47
200	4.60	7.80	12.80
250	7.00	7.00	11.00
300	7.65	7.10	10.43
350	8.40	7.20	10.06
400	10.00	7.50	10.00
450	12.40	8.00	10.22
500	20.70	9.00	11.00

- (1) What is perfect competition? (5 分)
- (2) What is the market price? (5 分)
- (3) What is the industry's output? (5 分)
- (4) What is the economic profit made by each firm? (5 分)
- (5) Do firms enter or exit the industry? Why? (5 分)