GT408

OLLSCOIL NA hÉIREANN, GAILLIMH
NATIONAL UNIVERSITY OF IRELAND, GALWAY

SUMMER EXAMINATIONS 2002

EC100 ECONOMICS PAPER 1
1st B.A. (Economic and Social Studies), St. Angela's College, Sligo

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Time allowed **THREE hours**
Marks: **350**

Please note that there are specific instructions for each of the three sections in this exam paper: section A, section B and section C (Multiple Choice questions).

SECTION A
(90 marks)

Instructions: Write a short note (maximum two paragraphs) on any **six** of the following:

1. Opportunity cost
2. Cross price elasticity of demand
3. Budget constraints
4. The substitution and income effects of a price change
5. The Law of Diminishing Marginal Returns
6. Economies of scale
7. Normal profits and supernormal profits
8. Monopolies and barriers to entry
9. Price discrimination
10. The effects of tariffs and quotas on trade

SECTION B
(160 marks)

Instructions: Answer two of the following three questions. All questions are worth 80 marks.

1.

(a) Consider the market for tuna. Using three well-labelled diagrams, show the effects of each of the following events on the equilibrium price and quantity of tuna:

i. Favourable weather conditions produce a much larger catch of tuna
ii. A Health Promotion agency reports that tuna contains healthy vitamins, minerals and oils
iii. An international cartel is established by tuna fishing countries, and the cartel succeeds in curtailing fishing of tuna

(b) The supply and demand for milk is described by the following equations. Quantity is measured in thousands of litres and price in euros (€).

$$Qd = 77 - 4P$$

$$Qs = 29 + 8P$$

(i) Calculate the equilibrium price and quantity. Show all calculations.

Concerned at the price of milk, the government implements a legally-binding price of €3 per litre.

(ii) Is this an example of a price floor or a price ceiling?

(iii) What will be the consequence of this action?

(iv) Calculate the size of any excess.

(c) Suppose the current market wage rate for car park attendants in New York is $6 per hour. A new minimum wage is introduced by the government, at a rate of $7 per hour.

(i) Illustrate the equilibrium situation before the introduction of the minimum wage.

(ii) Explain and illustrate clearly the effects of the minimum wage on car park attendants in New York.

2.

(a) Define price elasticity of demand.

(b) In the context of price elasticity of demand, explain what the following terms mean:

i. perfectly elastic demand
ii. perfectly inelastic demand

(c) Describe two of the determinants of the price elasticity of demand for a particular product or service.

(d) Briefly discuss the link between price elasticity of demand and Total Revenue.

(e) (i) In the context of income elasticity of demand, distinguish between necessity goods and luxury goods.

(ii) Suppose consumers' incomes rise by 10%. In response, the demand for computers rises by 5% and the demand for newspapers rises by 2%. Assume all other factors are held constant.

1. Calculate the income elasticity of demand for computers and newspapers.
2. Interpret your answers.

3.

(a) Compare and contrast the features of a perfectly competitive industry with that of an oligopoly.

(b) Kalk Ltd. is a small pencil manufacturing firm operating in a perfectly competitive market. The market price of pencils is €3 per packet. The firm's optimal output level is 1000 packets.

(i) Plot the Marginal Revenue curve of this firm (use a large diagram).

(ii) On the same diagram, sketch a typical Marginal Cost curve, and show the optimal output level.

At the optimal output level the short run average cost of producing a packet of pencils is €2.50.

(iii) Are Kalk's making supernormal profits or losses? Calculate the size of these profits or losses.

(iv) Sketch the U-shaped SATC curve of Kalk on the diagram.

(v) Indicate the size of any supernormal profits or losses on the diagram.

(vi) Assuming no barriers to entry, what would be expected to happen in the long run in this industry?

(vii) What would be the effects on industry supply and demand and on the price of packets of pencils? How would these changes affect Kalk?

SECTION C
Multiple Choice Questions (100 marks)

Please be careful when answering the following Multiple Choice questions. Write your answers in the same order as the questions. Please write clearly and legibly, as the letters "a", "c", and "d" can often be confused. Negative marking applies. (5 marks for a correct answer, 0 marks for an unanswered question and a penalty of –1 mark for an incorrect answer)

1. The recent large rises in house prices in Ireland have been caused by

   (a) low mortgage interest rates
   (b) a rise in net immigration
   (c) a shortage of zoned and serviced land
   (d) a strong rise in employment and disposable incomes
   (e) all of the above

2. If both demand and supply increase at the same time, the result is that

   (a) price always increases
   (b) price always decreases
   (c) quantity always falls
   (d) quantity always increases
   (e) both (a) and (d) occur

3. The level of supply can be affected by

   (a) an increase in the population
   (b) a change in input costs
   (c) changing tastes and preferences
   (d) changes in consumers incomes
   (e) all of the above

4. Rent ceilings generally lead to

   (a) increased supply of rented accommodation
   (b) no increase in the supply of rented accommodation
   (c) higher rents
   (d) increases in the quality of rented accommodation
   (e) none of the above

5. The price of cinema tickets increases. Holding everything else constant

   (a) the demand for popcorn in the cinema will rise
   (b) the quantity demanded of cinema tickets rises
   (c) there is movement down along the demand curve for cinema tickets
   (d) the demand curve for renting films on video shifts outwards
   (e) none of the above

6. Suppose the price of shirts rises by 40%. Subsequently, there is a 20% fall in the demand for ties. All other things being equal, the cross price elasticity of demand for ties with respect to shirts is

   (a) – 2
   (b) 2/3
   (c) 2
   (d) – 0.50
   (e) 0.50

7. Kieran says that he would buy one ice cream a day regardless of the price. If he is telling the truth

   (a) Kieran's price elasticity of demand for ice cream is 1
   (b) Kieran's demand for ice cream is perfectly price inelastic
   (c) Kieran's income elasticity of demand for ice cream is positive
   (d) none of the above are correct

8. Your firm manufactures radios. If the demand for your radios is very inelastic and you want to increase your total revenue, then you should

   (a) not change the price of your radios
   (b) cut the price of your radios
   (c) increase the price of the radios
   (d) put your radios on sale at 50% off
   (e) none of the above are correct

9. If the price elasticity of demand for milk is –0.10 we can say that

   (a) milk is a normal good
   (b) the demand for milk is elastic with respect to price
   (c) the demand for milk is perfectly elastic with respect to price
   (d) milk is an inferior good
   (e) the demand is very inelastic with respect to price

10. Indifference curves

   (a) are drawn based on income levels and prices
   (b) are drawn based on relative prices
   (c) are drawn so that utility increase as you move up along a given indifference curve
   (d) represent different combinations of the two goods which give equal satisfaction
   (e) all of the above

11. A movement from a lower to a higher indifference curve

(a) is caused by a fall in the consumer's income
(b) represents a lower level of satisfaction
(c) can be caused by rising prices
(d) can be caused by rising consumer incomes
(e) none of the above answers are correct

12. If the prices of both goods simultaneously fall in equal proportions then

(a) the budget line shifts inwards
(b) the budget line rotates inwards
(c) the consumer stays on the same indifference curve
(d) the consumer moves onto a lower indifference curve
(e) the budget line shifts outwards parallel

13. If a firm experiences constant returns to scale then

(a) as it produces more output its total costs decrease
(b) as it produces more output its total costs stay constant
(c) it has an incentive to reduce output
(d) as it produces more output its average costs per unit remain constant
(e) none of the above answers are correct

14. A profit-maximising firm in a competitive market is able to sell its product for €4.50. The optimal output level for the firm is 200 units. At this level of output the firm's total cost is €800. What is the total supernormal profit of this firm?

a) €900
b) €0.50
c) €1000
d) impossible to calculate
e) €100

15. If a competitive firm experiences a loss in the short run greater than their fixed costs, then they should

(a) continue to operate at a loss
(b) do nothing and hope for the best
(c) temporarily closedown
(d) try to increase their selling price
(e) none of the above answers are correct

16. The market for mobile telephone services in the Republic of Ireland is an example of

(a) a perfectly competitive market
(b) a monopoly
(c) an oligopoly
(d) a State-owned monopoly
(e) none of the above

17. Charging a lower price for a midweek bus journey, rather than at the weekend, is an example of

(a) lower income elasticity of demand
(b) perfectly inelastic price elasticity of demand
(c) price discrimination
(d) diseconomies of scale
(e) all of the above

18. If a consumer is willing and able to pay €50 for a particular product but only has to pay €35 then

(a) the consumer surplus is €50
(b) the consumer surplus is €35
(c) the consumer surplus is €15
(d) the consumer surplus is €85
(e) none of the above are correct

19. If a tax is introduced into the market for a particular product, then the result will be

(a) consumer surplus will rise
(b) equilibrium quantity will increase
(c) the price paid by consumers will rise and the price received by firms will fall
(d) producer surplus will rise
(e) all of the above are correct

20. Starting from a situation of free trade, the introduction of an import quota on shoes causes

(a) an increase in the selling price of pairs of shoes
(b) lower amounts of imports of shoes
(c) a gain for the holders of the quota licences
(d) a rise in domestic production of shoes
(e) all of the above