907

Ollscoil na hÉireann, Gaillimh
National University of Ireland, Galway

Semester II Examinations, 2004/2005

Exam Code(s)	1BA1, 1BA6, 1BC2, 1BC3, 1BC5, 1BF1, 1FM1, 1CL1 (MIS or German or Spanish)
Exam(s)	1st B.A., 1st B.A. (PSP), 1st B.Comm. (French), 1st B.Comm. (German), 1st B.Comm. (Italian), 1st B.Sc. (Info.Sys.), 1st B.Sc. in Fin. Maths. & Econ.), 1st B.Corp. Law (MIS or German or Spanish)
Module Code(s)	EC100
Module(s)	Economics
Paper No.	I
Repeat Paper	Special Paper
External Examiner(s)	Professor Vincent Munley
Internal Examiner(s)	Mr. Brendan Kennelly Dr. Gerard Turley
Instructions:	Students are required to answer all questions in Section A (40%) on the MCQ answer sheet provided, and any FOUR questions in Section B (60%). All questions in Section B carry equal marks. Please note that there is no negative marking in Section A.
Duration	3 hrs.
No. of Answer books	MCQ
Requirements:	
Handout	
MCQ	
Statistical Tables	
Graph Paper	
Log Graph Paper	
Other Material	
No. of Pages	7
Department(s)	Economics

Section A

1. The primary purpose of the 'market' is to
(a) reward economic agents;
(b) supply goods;
(c) allow firms to make profits;
(d) allocate resources;
(e) allow consumers to choose goods and services.

2. Traditional neoclassical microeconomics relies on
(a) competitive markets;
(b) equilibrium processes;
(c) demand and supply analysis;
(d) rational economic agents;
(e) all of the above.

3. Suppose the market for cheese is described by the following equations:

$Qd = 71 - 3P$

$Qs = P - 1$

where Q = quantity (000 kgs of cheese per week) and P = price per kg (euro). Which of the following statements is true?
(a) The market price for cheese is 17 euro;
(b) The quantity traded is 17,000;
(c) There will be a shortage of 8,000 units at a price of 20 euro;
(d) There will be a shortage of 8,000 units at a price of 15 euro;.
(e) (a) and (b) above.

4. If both demand and supply decrease, then
(a) price could either rise or fall and quantity traded will decrease;
(b) price will fall and quantity traded will increase;
(c) price will rise and quantity traded will fall;
(d) price will rise and quantity traded could either increase or decrease.
(e) not enough information provided.

5. When we study the quantity supplied of a good and invoke the "other things equal" assumption, we assume all of the following are constant except the
(a) prices of factors of production;
(b) price of the good itself;
(c) technology;
(d) subsidies;
(e) taxes.

6. Which of the following could cause a fall in house prices?
(a) A decline in house-building;
(b) An increase in lending by banks;
(c) A fall in mortgage interest rates;
(d) A decrease in migrant workers;
(e) both (b) and (d) above.

7. Price elasticity of demand for a particular service is η=-0.7. At this point
(a) demand is unit elastic.
(b) demand is inelastic.
(c) demand is elastic.
(d) total revenue is maximised.
(e) both (b) and (d) are correct.

8. All inferior goods have
(a) income elasticities of demand greater than 1;
(b) price elasticities of demand greater than 1;
(c) positive price elasticities of demand;
(d) negative income elasticities of demand;
(e) both (c) and (d) above.

9. When economists speak of the utility of a certain good, they are referring to
(a) the demand for the good;
(b) the usefulness of the good in consumption;
(c) the opportunity cost involved;.
(d) the rate at which consumers are willing to exchange one good for another;
(e) the satisfaction gained from consuming the good.

10. If income increases, the budget line will
(a) shift inward;
(b) shift outward;
(c) become steeper;
(d) become flatter;
(e) both (b) and (d) above.

11. In the theory of demand, consumers' tastes and preferences are portrayed by
(a) the budget line;
(b) indifference curves;
(c) demand curves;
(d) Engel curves;
(e) the equilibrium point.

12. Consumer surplus is measured in terms of the
(a) surplus payment made in excess of the minimum payment needed to keep the factor in its present use;
(b) change in demand resulting from a change in the price level, alone;
(c) highest valued alternative forgone;
(d) excess of what a person is prepared to pay for a good over what the person actually pays;
(e) the excess between quantity demand and quantity supplied.

13. When marginal revenue exceeds marginal cost, the profit-maximising firm will
(a) keep production constant;
(b) decrease production;
(c) increase production;
(d) none of the above;
(e) not enough information is provided.

14. Which of the following statements about the short-run marginal cost curve is not true?
(a) marginal cost equal average cost when average cost is a minimum;
(b) when average cost is falling, marginal cost will be below average cost;
(c) marginal cost will be rising under conditions of diminishing returns;
(d) marginal cost is unaffected by changes in factor prices;
(e) marginal costs depend on variable costs as opposed to fixed costs.

15. In competitive markets, it is assumed that
(a) firms are profit maximisers;
(b) one firm dominates the market;
(c) firms are interdependent;
(d) both (a) and (c) above.
(e) (a), (b) and (c) above.

16. The marginal cost curve for a perfectly competitive firm
(a) cuts the average variable cost at its maximum point;
(b) shows that marginal cost increases as output increases;
(c) is the supply curve, above the shutdown price;
(d) is upward sloping because of the law of diminishing utility;
(e) (b) and (c) above.

17. The special identity for a perfectly competitive firm is
(a) ATC = AVC;
(b) P = MC;
(c) MR = MC;
(d) AR = P;
(e) AR = AVC.

18. A measure of the monopoly power possessed by a firm is the difference between
(a) marginal revenue and marginal cost;
(b) market price and marginal cost;
(c) quantity demanded and quantity supplied;
(d) average total and average fixed cost;
(e) average revenue and market price.

19. In standard microeconomic theory, consumers and firms are assumed to maximise
(a) utility and revenue respectively;
(b) budgets and costs respectively;
(c) utility and profits respectively;
(d) choices and sales respectively;
(e) revenue and profits respectively.

20. When markets are imperfect and exhibit externalities
(a) government intervention will not improve market performance;
(b) there is an inefficient allocation and use of society's scarce resources;
(c) society's well-being is not affected;
(d) government intervention will always improve market performance;
(e) markets are working well.

Section B

1. (a) (30 marks)

Define the following terms

i. market economy
ii. equilibrium
iii. supply
iv. price controls
v. price floor
vi. shortages

(b) (20 marks)

Use an appropriate demand and supply diagram to explain the impact of a reduction in supply on the market-clearing price and quantity.

(c) (50 marks)

Table 1 Demand and Supply Schedules for cases of fish

Price per Case (p/w)	*Quantity demanded*	*Quantity supplied*
70	20	140
60	60	120
50	100	100
40	140	80
30	180	60

i. Draw the demand and supply curves for fish (in your answerbook). Label the axes properly. (10)
ii. What are the equilibrium price and quantity traded? (10)
iii. Is there a surplus or shortage at a price of 60? Calculate the excess. (10)
iv. Calculate the excess demand or supply at a price of 30. Is this a shortage or a surplus? (10)
v. Suppose the local population grows sufficiently that the demand for fish increases by 60 cases per week at every price. Draw the new demand curve. What are the new equilibrium price and quantity traded? (10)

2. (a) (40 marks)

Consider the following equations:

$$Qd = 30 - 2P$$
$$Qs = 3P - 10$$

i. Find the equilibrium using simultaneous equations. (10)
ii. On a diagram, sketch the demand curve and the supply curve. (10)
iii. Suppose P = 9. Calculate the shortage or surplus. (10)
iv. Suppose P = 5. Calculate the shortage or surplus. (10)

(b) (30 marks)

What is the law of demand? Sketch a demand curve for a normal, inferior and Giffen good.

(c) (30 marks)

What factors determine the position of the supply curve? Explain how a change in one of these factors shifts the supply curve. Use an appropriate diagram.

3. (a) (40 marks)

Explain the concept 'elasticity of demand'. What is the formula for the (point) price elasticity of demand? Outline the factors that determine the price elasticity of demand.

(b) (30 marks)

Table 2 The demand for peanuts

Price per packet	*Quantity demanded*	*Total expenditure*	*Own price elasticity of demand*
1.80	20		
1.50	30		
1.20	40		
0.90	50		
0.60	60		

i. Draw the demand curve. (5)
ii. Calculate the total spending at each price shown (in your answerbook). (5)
iii. Calculate the own price elasticity of demand for the three prices between 0.90 and 1.50 (i.e. 0.90, 1.20 and 1.50). (15)
iv. At what price in Table 2 is revenue at its greatest? Explain, with reference to elasticity. (5)

(c) (30 marks)

Table 3 Cross-price and own-price elasticities of demand in Uluru

Percentage change in quantity demanded of:	*In response to a one % change in price of* **Food**	**Wine**	**Beer**
Food	-0.27	0.09	0.03
Wine	-0.14	-1.20	0.25
Beer	-0.05	0.53	-0.85

i. Comment on the own-price demand elasticities of the three goods, identifying for which good demand is elastic and for which it is inelastic. (10)
ii. What is the effect of a change in the price of food on the consumption of wine and of beer? What does this suggest about the relationship between food and the other commodities? (15)
iii. Interpret the meaning of the value in the top right-hand cell, i.e. 0.03. (5)

4. (a) (25 marks)

What are the assumptions underlying the theory of consumer behaviour?

(b) (50 marks)

What is the purpose of the budget line? What is the purpose of indifference curves? Using the budget line and indifference curves, explain and show how the optimal consumption bundle is derived.

(c) (25 marks)

Using the substitution effect and income effect analysis, explain why the demand curve for a Giffen good is upward sloping.

5. **(a) (30 marks)**

Explain the following production terms

i. inputs
ii. production function
iii. marginal product
iv. law of diminishing returns
v. increasing returns to scale

(b) (30 marks)

Explain with the aid of a diagram the link between the marginal product and marginal cost. Why does the marginal cost curve slope upward from left to right?

(c) (40 marks)

Define marginal revenue and marginal cost. Show, with the aid of a diagram, how the profit-maximising output level for a perfectly competitive firm can be identified by comparing marginal revenue with marginal cost.

6. **(a) (30 marks)**

What are the assumptions underlying the perfectly competitive market? How do these assumptions differ from the "real world"?

(b) (40 marks)

In a competitive market, the short-run supply curve for a firm in its short-run marginal cost curve above the shutdown price. Explain. Use appropriate diagrams where necessary.

(c) (30 marks)

Using a diagram, explain the short-run equilibrium position of the monopolist.