

PART II

ECONOMICS

ECON 207 MICROECONOMIC ANALYSIS MAIN (2 hours 30 mins + 30 mins uploading time)

Candidates should answer **THREE** questions including **ONE** question from **SECTION A** and **ONE** question from **SECTION B**. All questions carry equal marks.

You have 2.5 hours to complete this paper. Within this time, you must answer and prepare a single response in digital PDF format (typing all large blocks of text and scanning of any formula, diagrams, graphs etc.), and most importantly, you must save your file before the end of the 2.5 hour window (evidenced in the file properties date/time). You then have a further 30 minutes in which to upload your examination file to the Moodle page. If you have any issues uploading your file, be sure to e-mail your file to economics.examhelp@lancaster.ac.uk before the end of the upload window to avoid penalty.

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SECTION A

1. "In two-part pricing with non-identical customers, a monopoly will charge a price equal to marginal cost if it can charge the two customers different access fees. However, if the firm must charge the two consumers the same access fee, then it will set a price above marginal cost." Explain, with the aid of appropriate diagrams which use suitable numerical values to uphold your argument.

Note: You should not use the numerical values given in the textbook.

2. Jane's demand function for chocolate smoothies (x) is $x(p_x, p_y, m) = \frac{2m}{5p_x}$ where y represents lemon cake, m income and p_x and p_y are the prices of the two goods. Her income is £1,000, the price of x is £5, and the price of y is £20.
 - a) What will Jane's initial demand for chocolate smoothies be?
 - b) How will this change if the price of chocolate smoothies falls to £4?
 - c) If Jane's income were to change at the same time so that she could exactly afford her old commodity bundle at $p_x = 4$ and $p_y = 20$, what would her new income be?
 - d) What would Jane's demand for chocolate smoothies be at the level of income in c) and $p_x = 4$ and $p_y = 20$?
 - e) How much of Jane's change in demand for chocolate smoothies is due to the substitution effect?
 - f) How much of Jane's change in demand for chocolate smoothies is due to the income effect?

Note: All parts of this question carry equal marks.

SECTION B

3. Illustrate graphically two different types of market failure. Draw the quantity of the good that is provided in each of the cases and show in your figures what governments can do in order to alleviate the different forms of market failure.
4. (a) Explain strategies that have been taught in the lectures that managers may employ in order to reduce competition in a market.
 - (b) An incumbent firm would like to build a reputation of being tough in order to deter entry by competitors. The incumbent firm earns £100 million per year charging the monopoly price of £10. If a competitor enters into the market, the incumbent firm's profit would be reduced to £40 million per year. If the incumbent firm increases its output, its price will be lowered to £8, the entrant will stay out of the market and the incumbent firm will earn profits of £50 million per year for the indefinite future. At which interest rate would it be profitable for the incumbent firm to employ limit pricing?

Note: Both parts of this question carry equal marks.

END OF PAPER