

## **Econ5026 – Strategic Business Relationships.**

### **Midterm – 20 September 2017**

*Answer all questions in the answer booklets provided..*

*Time allowed: 1 hour 20 minutes (80 minutes).*

*Students are allowed to use non-programmable calculators.*

*Written answers should be done in pen, however diagrams may be drawn in pencil.*

*In your answers please show all working.*

**NOTE THAT THE EXAM IS WORTH 50 MARKS IN TOTAL. TAKE CARE TO NOTE HOW MANY MARKS ARE ALLOCATED FOR EACH QUESTION AND ALLOCATE YOUR TIME ACCORDINGLY.**

Name: \_\_\_\_\_

Student number: \_\_\_\_\_

Signature: \_\_\_\_\_



1. 5 marks

- (i) The economic approach highlights the importance of incentives. Using a diagram, explain how individual's response to monetary incentives might be used to alter how careful financial advisers are when they give advice. (5 marks)

2. 10 marks in total

- (i) The Ramrods are a small music band that sells music over the internet to two different types of consumers. The demand curve for each type of consumer is set out below.

Type A consumer:  $p = 30 - Q$

Type B consumer:  $p = 20 - Q$

Assume that the band has come up with a new pricing strategy which means that they offer buyers one of two options/ packages.

Basic: 20 songs at a total price of 200.

Premium: 30 songs at a total price of 450.

With these options/ packages, what will each type of purchaser buy? Note you should assume that each buyer buys one package and they choose the one that maximizes surplus.

If they continue to sell the Basic package, what is the maximum price they can charge for the premium package to maximize profit? (7 marks)

- (ii) Discuss using a diagram how a firm might extract consumer surplus using block pricing (3 marks)

3. 3 marks.

Suppose that we have two restaurants located at either end of a road that is 100 kilometers long. Annie's German restaurant is located at kilometer zero, and Masako's Sushi Bar is located at kilometer 100. In each case the location of the firm is fixed and the only choice they have is over price. There are 100 consumers spaced equally along the road. Assume that the cost of travelling each kilometer is \$1.

If meals at Annie's cost \$25, and meals at Masako's cost \$45, where will the marginal consumer be located?

Assume that the cost of preparing a meal costs \$25 at both restaurants. Does this outcome represent a Nash equilibrium? Why or why not? *Hint: Ask yourself if Annie has any incentive to change her behaviour given that Masako does not change their behaviour.*

4. 2 marks.

Very briefly (in a short paragraph), explain what is meant by preemption.

5. 6 marks

Consider two competitors (Springvale and Eauclear) that are considering working together to set a higher prices and thereby increase profits. After reaching an agreement the firms can choose to cooperate or cheat. The payoffs from cooperating and cheating are presented below:

		<b>Springvale</b>	
		Cooperate	Cheat
<i>Eauclear</i>	<i>Cooperate</i>	(250, <b>165</b> )	(85, <b>450</b> )
	<i>Cheat</i>	(450, <b>35</b> )	(100, <b>65</b> )

Is there a pure strategy Nash Equilibrium in this game if the players make their choices simultaneously? If so identify it and describe what is meant by a Nash Equilibrium (2 marks)

Draw a game tree for this game if Eauclear makes a decision and then Springvale makes its decision. Find the equilibrium outcome of the game.

Suppose that Eauclear and Springvale actually interact repeatedly. Describe how a cooperative outcome might be achieved? (2 marks)

6. Essay question (24 marks) – Answer one of the following two questions.

(a) Market structure is an important determinant of market outcomes. In some market structures barriers to entry are particularly important to understanding market outcomes. Describe what is meant by barriers to entry. Discuss the differences in the US and German beer markets and why such differences might exist.

(b) Describe what is meant by first, second and third degree price discrimination. Discuss how the internet may have changed the pricing behavior of firms and whether we would expect to see more or less price dispersion over time.