UNIVERSITY OF WARWICK
Summer Examinations 2015/2016
Industrial Economics 1: Strategic Behaviour

Time Allowed: 1.5 hours.
Answer TWO questions from Section A (60 marks) and ONE question from Section B (40 marks). Answer Section A questions in one booklet and Section B questions in a separate booklet.

Read carefully the instructions on the answer book provided and make sure that the particulars required are entered on each answer book. If you answer more questions than are required and do not indicate which answers should be ignored, we will mark the requisite number of answers in the order in which they appear in the answer book(s): answers beyond that number will not be considered.

## Section A: Answer TWO Questions

1. Consider two consumer types $A$ and $B$ each having a maximum willingness to pay of $£ 30$ for a product. There are many retailers, $1 / 3$ of which sell the product at $£ 10$ and $2 / 3$ sell it at $£ 11.50$. Each consumer is only able to identify the price at retailer $i$ by incurring a search cost. For each retailer visited consumers type A incur a cost of 40p, whereas consumers type B incur a cost of 80p.
(a) Assuming a consumer of type A wants to buy one unit of the product and follows a sequential search rule, calculate her reservation price. (3 marks)
(b) How many retailers will she expect to visit before finding one selling at or below her reservation price? (4 marks)
(c) What is the reservation price for a consumer of type B? (3 marks)
(d) Suppose that alternative consumers of type A and B instead follow a nonsequential search rule. How many searches will consumers of types A and B make in this case? Show your working. (8 marks)
(e) The regulatory agency for this industry decides to reveal that some retailers sell at $£ 10$ and others at $£ 11.50$, including naming the retailers according to type. However, if a consumer has been a customer of one retailer, they face a $£ 3$ switching cost to move to another. The $£ 11.50$ retailers meet up (perhaps illegally) and decide to consider what strategy to adopt in the face of the regulator's decision. As an economist employed by them, what would you advise and why? ( $\mathbf{1 2}$ marks)
2. Suppose there are three broad types of TV channels that the sole pay-TV operator wishes to market (News, Sport and Education). There are two broad categories of consumer. The TV company estimates that the monthly reservation prices for these consumer types are as follows:

| Valuations <br> Consumer |  | Channel type |  |
| :--- | :---: | :---: | ---: |
| type | $\mathbf{N}$ | $\mathbf{S}$ | $\mathbf{E}$ |
| $\mathbf{A}$ | 13 | 7 | 11 |
| $\mathbf{B}$ | 7 | 12 | 3 |

Calculate the maximum per-consumer revenues that can be obtained:
(a) By setting a separate price for each product. (4 marks)
(b) By engaging in a bundling strategy across all three products. (4 marks)
(c) By engaging in a mixed bundling strategy (which need not include all possible combinations). (6 marks)

Hence consider the following:
(d) What is the optimal strategy for the firm to pursue in this instance? (4 marks)
(e) As a result of the loss of some important sports rights to another operator, the value for S declines to 3 for consumer type A . Does this alter the optimal strategy at all? (6 marks)
(f) Returning to the original situation, how would the mixed bundling strategy differ from a strategy of Bundle-Sized Pricing (BSP) in case (c)? (You need not calculate the optimal BSP strategy.) (6 marks)
3. Describe what you understand by three of the following concepts, explaining the importance for the subject area of industrial economics and, where appropriate, illustrating your understanding by giving practical examples. ( 10 marks each)
(a) Asset specificity
(b) Experience goods
(c) Switching costs
(d) Second degree price discrimination

## Section B: Answer ONE Question

4. What are the key features required in order that firms can practice price discrimination in a market? Would we expect price discrimination to be less pronounced in oligopoly than in monopoly? How does the nature of price discrimination practised depend on the information available to the firms adopting it? ( $\mathbf{4 0}$ marks)
5. Explain the various roles that advertising is said by economists to have in relation to providing consumers with views about a product. A friend argues with you that advertising inevitably increases the price of the product, and is therefore undesirable from a consumer's point of view. Carefully examine your friend's argument, discussing the extent to which you believe it to be true. ( 40 marks)
6. Explain what is meant by a vertical restraint, giving examples. Why might a supplier wish to impose vertical restraints on firms it sells to? One such example of a vertical restraint is Resale Price Maintenance, but this is commonly prohibited by EU competition law. In its absence, by what alternative mechanisms of restraint can firms achieve similar results? Is it possible for buyers to impose vertical restraints on sellers? ( $\mathbf{4 0}$ marks)
