

THE COLLEGES OF OXFORD UNIVERSITY

ECONOMICS AND MANAGEMENT

Specimen of Written Test at Interview

Issued May 2000

Time allowed: 1 hour.

For candidates applying for the joint school of Economics and Management

Answer the two questions in Section A, and as many of the questions in Section B as you can. Each question is worth 10 points.

SECTION A

Read the following passage carefully and answer both questions.

TRUST OR CONTRACT?

I have in front of me an American marriage contract. There are no lofty platitudes here about sickness and health, for richer for poorer. The loving couple's attorneys have an entirely down-to-earth approach. The contract does not just demand sexual fidelity. It divides up the housework – not equally, in this example – Jill is responsible for it in three weeks of the month and Jack only in one. Jack is allowed to go out with his own friends from time to time, but not in excess of a prescribed frequency. And so it goes on.

The British courts would, thank goodness, decline to enforce such a document. The American courts might be willing to do so. Given the lengths to which the US legal system stretches, one can all too readily envisage the sheriff handcuffing Jill to the vacuum cleaner or a court awarding \$1 million damages against Jack for one night too many on the town. Our own legal system is not yet out of control. But the outcomes of the Guinness and Blue Arrow cases can have left very few people thinking that we have got these areas of commercial law right. It is a good moment to consider what role the law can play in governing business relations, and when – as in marriage – it should leave well alone.

Reflect for a moment on *why* that marriage contract is so absurd. Either there is trust between the parties to a marriage, a free flow of information, and flexibility on both sides, and the contract is completely unnecessary. Or else there is not, in which case the relationship will not work satisfactorily in any event and the contract is completely useless. The English legal position – which says that if you want to end the relationship we will provide a forum in which you can sort things out, but otherwise you must settle who cleans the house between yourselves – gets things precisely right.

Now this is not only true of private life; it is often true in business as well. There may be a legal contract – your lawyers will almost certainly insist on one – but if you need to look at it that suggests that the commercial relationship is already in deep trouble. In a good business arrangement, you respond flexibly, you share

information, you recognize each other's needs and objectives. The real contract between you – often very different from the one the lawyers have drawn up – is largely implicit and it is enforced, not by reference to the courts, but by the need the parties have to go on doing business with each other.

If you wish to look for a structure of business relationships which relies heavily on these devices, turn to Japan. There are few commercial lawyers in Japan, and Japanese commercial contracts are often informal and framed in general terms. Japanese business is characterized by keiretsu – networks of subcontractors who are willing to make long-term supply commitments – and kigyoshudan – groups of companies ranged across different industries which share common trading and banking relationships and often have reciprocal shareholdings in each other. These types of arrangements – designed to enforce performance by establishing stability in commercial relationships – have given Japanese industry a capacity to ensure product quality, exchange information, and respond effectively to changing market information which the tightest of legal contracts has failed to achieve for these firms' US competitors.

The role the law can play in business is a strictly limited one, and legal processes can never enforce rules of good conduct or ensure the smooth running of continuing relationships.

The extravagant entertainment associated with Japanese business, designed to solidify commercial relationships by binding them with social ones, is hardly less expensive than protracted meetings with Wall Street attorneys. It might even be more fun.

Taken from J. Kay, *The Business of Economics*, 1996.

1. Summarize the passage in your own words, using no more than 100 words. (10 points)
2. Do you agree with the author that “the role the law can play in business is a strictly limited one”? Explain your reasons for agreeing or disagreeing. (10 points)

SECTION B

1. The host to the game show “Let's Make a Deal”, Monty Hall, asks contestants to choose the prize behind one of three curtains. Behind one curtain lies the grand prize; the other two curtains conceal only small gifts. Once the contestant has made a choice, Monty Hall reveals what is behind one of the two curtains that was not chosen. Monty must know where the grand prize is, because never in the history of the show has he ever opened up an unchosen curtain to reveal the grand prize. Having been shown one of the lesser prizes, the contestant is offered a chance to switch curtains. If you were on stage, would you accept that offer and change your original choice? Explain your reasoning as fully as possible. (10 points)

2. You are thinking of buying a second-hand car. You are prepared to pay 5,000 euros for a good car but only 1,000 euros for a bad car. Unfortunately you do not know whether the particular car being offered for sale is good or bad. You believe that a quarter of the cars on the road are good and three-quarters are bad.

- (i) What is the expected value of the car to you? (2 points)
- (ii) How much would you offer for this car? (Note: there is no right answer to this question, it will depend on your preferences, but you should explain briefly your reasoning behind your answer). (1 point)
- (iii) You now know that the seller of a good car will only sell it if he gets at least 4,000 euros, but the seller of a bad car will sell for any price above 500 euros. What would you offer now for this car? Assume that the law requires that an offer to buy is binding, so you cannot subsequently alter your offer once it has been accepted. (5 points)
- (iv) How might the seller of a second-hand car convince a purchaser that it is of high quality? (2 points)

3. Two electricity-generating companies are currently unregulated in their emissions of carbon dioxide (CO₂). Company A emits 90 units of CO₂ and B emits 100 units. The government now regulates their emissions. Each firm is allowed only 70 units of emissions. It costs A \$25 per unit for the first 10 units of emissions reduction and \$50 per unit for reductions above 10 units. B's emissions reduction costs \$25 per unit for the first 20 units and \$30 per unit for reductions above 20 units.

- (i) How much will it cost A and B to reach their maximum allowed emissions levels? (3 points)
- (ii) Suppose now that each firm is given permits to pollute. A permit allows its owner to emit one unit of CO₂. Each firm is allocated 70 permits. The permits can be bought and sold freely, and B decides to sell 10 permits to A at the current market price of \$40. Show that both A and B are better off with this transaction than when they do not trade pollution permits. (5 points)
- (iii) Do you think that firms should be allowed to trade pollution permits? (2 points)