INSTRUCTIONS TO CANDIDATES

Please read these instructions carefully, but do not open the question paper until you are told that you may do so. This paper is Section 2 of 2.

This question paper requires you to read a single passage and answer a related question.

You should write your answer in the space provided in this question paper. Please complete this section in black pen.

You can use the blank inside front and back covers for rough working or notes, but no extra paper is allowed. Only answers in the space indicated in the paper will be marked.

Dictionaries and calculators may NOT be used.

Please wait to be told you may begin before turning this page.

This question paper consists of 10 printed pages and 2 blank pages.
Read the extract taken from Paul Seabright’s *The Company of Strangers: A Natural History of Economic Life* (2004, New Jersey: Princeton University Press) and then answer the question below in the space provided in this booklet.

Your answer will be assessed taking into account your ability to construct a reasoned, insightful and logically consistent argument with clarity and precision.

**QUESTION**

How does cooperation between people take place when no one is explicitly in charge?

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**Who's in Charge?**

**The World’s Need for Shirts**

This morning I went out and bought a shirt. There is nothing very unusual in that: across the world, perhaps 20 million people did the same. What is more remarkable is that I, like most of these 20 million, had not informed anybody in advance of what I was intending to do. Yet the shirt I bought, although a simple item by the standards of modern technology, represents a triumph of international cooperation. The cotton was grown in India, from seeds developed in the United States; the artificial fiber in the thread comes from Portugal and the material in the dyes from at least six other countries; the collar linings come from Brazil, and the machinery for the weaving, cutting, and sewing from Germany; the shirt itself was made up in Malaysia. […]

Every single one of these people who has been laboring to bring my shirt to me has done so without knowing or indeed caring anything about me. To make their task even more challenging, they, or people very much like them, have been working at the same time to make shirts for all of the other 20 million people of widely different sizes, tastes, and incomes, scattered over six continents, who decided independently of each other to buy shirts at the same time as I did. And those were just today’s clients. Tomorrow there will be another 20 million – perhaps more.

If there were any single person in overall charge of the task of supplying shirts to the world’s population, the complexity of the challenge facing them would call to mind the predicament of a general fighting a war. […]

In fact there is nobody in charge. The entire vast enterprise of supplying shirts in thousands and thousands of styles to millions and millions of people takes place without any overall coordination at all. […]

What about the production of the world’s shirts? The goal of this activity cannot be summed up simply in the phrase “producing shirts.” The quality, the design, the variety of styles, the durability of the cloth, and the location of the different people with their different tastes represent a whole array of dimensions along which decisions must be taken on behalf of all the twenty million people a day who buy shirts – dimensions that are at least as important as the sheer quantity of shirts produced. There is no agreed-upon goal. […] By comparison with the passengers in the aircraft, there is also very little direct interconnection between the activities of all the world’s wearers of shirts, other than that they are all participants in the market for shirts. […]
By contrast with the overwhelming nature of the problems that would face an individual put in charge of global shirt production, each of us can carry out our task of choosing a shirt fairly effectively without outside guidance. A shirt is an item whose quality is more or less visible to inspection before it is bought (whatever reservations one may have about the quality of the buttons). […]

Large numbers also help us to understand one of the most mysterious features of a system with no one in charge: its apparent ability to anticipate my desire when I have done nothing to communicate that desire to anyone. We may like to think of ourselves as individuals quite unlike others, but in many respects our behaviour is highly predictable. Partly this is because of our biology: we have physical needs that are by and large common to other members of our species. Social conventions also play a part: nothing in our biology obliges us to have our meals when other people are having theirs, but it makes life more pleasant if we do. But finally it is the sheer number of us that makes our behavior predictable, for large numbers of people tend under many conditions to behave in much more regular ways than do any of the particular individuals of which such crowds are composed. Statisticians of the early nineteenth century were fascinated by the fact that even such profoundly personal actions as suicide occurred in a sufficiently regular way in large populations as to be predictable within certain limits. And our more banal activities of working, dressing, shopping, cooking, and traveling turn out, in the mass, to display a regularity sufficiently striking for whole centers of productive activity to be based upon it. If I had not bought my shirt this morning, somebody rather like me would very probably have bought it within a few days. It is on that conjecture that my shirt-maker has built a business.

These four factors – large numbers, great complexity, few direct inter-connections between the actions of the different buyers of shirts, and a reasonable ability on the part of ordinary buyers to assess the quality of what they are buying – provide the beginning of an answer to our earlier question: why is it a relief to know that no one is in charge of making the world’s shirts? One of the great intellectual achievements of modern economics has been to work out very precisely the circumstances under which decentralized systems of market exchange can produce results that are efficient, in the sense of improving the condition of every individual as far as possible whenever this can be done without harming someone else. This definition of efficiency was originally proposed by the Italian economist and sociologist Vilfredo Pareto and is now known as Pareto-efficiency. The intellectual achievement of economics in showing how and when market exchange can achieve Pareto-efficiency is not the same thing as a practical achievement, for as we shall see, all real-life systems of market exchange fail to live up to these demanding conditions, sometimes to a disturbing degree. But shirts are a pretty good advertisement for decentralized market exchange. They are also a remarkable reminder of how much of the pattern of modern life has emerged without ever having been consciously willed by anyone.