



Cambridge International AS & A Level

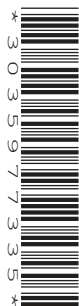
ECONOMICS

9708/23

Paper 2 Data Response and Essay

May/June 2020

1 hour 30 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **two** questions in total:
 - Section A: answer Question 1.
 - Section B: answer **one** question.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.
- You may use a calculator.
- You may answer with reference to any economy you have studied where relevant to the question.

INFORMATION

- The total mark for this paper is 40.
- The number of marks for each question or part question is shown in brackets [].

This document has **4** pages. Blank pages are indicated.

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Section A

Answer this question.

1

The growing problem of plastic waste

It has been estimated that, globally, consumers buy a staggering one million plastic bottles every minute and that 91% of these are not recycled. There is now real and growing concern about the serious threat to marine life caused by the dumping of plastic waste in the sea.

There are an estimated 150 million tonnes of plastic waste in the world's oceans. Every year, millions of birds, mammals and fish die from eating or getting tangled in plastic waste. There is also growing evidence that humans could become ill when consuming fish that has eaten plastic waste. A recent study found that people who often consume seafood eat up to 11 000 tiny pieces of plastic each year. Those living in parts of South East Asia and around the Mediterranean sea are most at risk.

The scale of these problems is worst in Asia's developing economies. For example, a recent report from Pakistan stated that 'Continued dumping of plastic products has become a serious threat to animals and plants inhabiting coastal and offshore waters. People do not seem to understand how damaging plastic waste is for the oceans.' This is a typical concern; significantly, no solutions to these problems have been proposed by Pakistan's government.

One possible way to tackle the problem is to introduce a 'bottle tax' on drinks that are sold in plastic bottles. The amount of tax would ideally depend on the size of the bottle, for example being \$0.10 for a one litre bottle and \$0.20 for a two litre bottle.

The UK government is considering imposing a 'deposit return' scheme similar to those that are successfully operating in Denmark, Germany and Sweden. Customers would pay a deposit when buying drinks in plastic bottles and are refunded the deposit if they return the empty plastic bottles to a retailer.

In most developed countries the legal disposal of plastic waste is heavily regulated. The most common method of disposal is for plastic waste to be buried in landfill sites. Interestingly, in China and India, landfill sites often have very few plastic bottles because people collect bottles and sell them to gain a source of income.

Another solution to the problem of plastic waste is to create a new product by recycling the plastic; more research needs to be carried out to evaluate this option, but this research is expensive and beyond the reach of many developing economies.

The demand for plastic products is forecast to increase due to its widespread use in agriculture, manufacturing and retailing. Unless something is done about the problems of disposal, even more plastic rubbish will find its way into our oceans. The key issue for many of Asia's developing economies is that their options appear to be limited.

Sources: Dawn, 24 June 2017 and Punjab Daily Times, 1 November 2017

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- (a) Explain why a plastic bottle can be classified as both a private good and a demerit good. [4]
- (b) (i) Distinguish between an *ad valorem* tax and a specific tax. [2]
- (ii) Explain whether the 'bottle tax' referred to in the extract is an *ad valorem* tax or a specific tax. [2]
- (c) (i) With the help of a diagram, analyse the impact of the 'bottle tax' on the price and sales of plastic bottles. [2]
- (ii) With the help of a diagram(s), explain what would determine the incidence of the 'bottle tax' on the consumers of plastic bottles. [4]
- (d) Discuss whether taxing plastic bottles is the most effective way of reducing plastic waste in developing economies. [6]

Section B

Answer **one** question.

- 2 (a) The price elasticity of supply for a new smartphone is estimated at 0.8 in the short run and 1.5 in the long run.

Explain price elasticity of supply and suggest why the above estimates differ. [8]
- (b) Discuss whether, for a manufacturer of smartphones, knowledge of their product's price elasticity of demand or its cross elasticity of demand with respect to other products is more useful. [12]
- 3 The annual rate of inflation in an economy increased sharply and unexpectedly.

(a) Explain the likely consequences of such an increase for consumers and firms. [8]
- (b) Discuss whether a substantial rise in interest rates is the best way of correcting this increased rate of inflation. [12]
- 4 (a) Explain why the theory of comparative advantage may **not** give a true account of the benefits of free trade. [8]
- (b) In April 2018, the United States (US) government threatened to impose tariffs of 25% on a wide range of imports from China including steel, technological products, medicines and household goods such as washing machines. In turn, China threatened to retaliate with the same proposed tariff on imports from the US of soya beans, cars and chemicals.

Discuss whether the US and China could both benefit from the imposition of tariffs on goods such as those identified. [12]

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