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# A-level ECONOMICS

## Paper 1 Markets and Market Failure

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Time allowed: 2 hours

### Materials

For this paper you must have:

- an AQA 12-page Answer Book
- a calculator.

### Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front cover of your answer book.  
The **Paper Reference** is 7136/1.
- In **Section A**, answer **EITHER** Context 1 **OR** Context 2.
- In **Section B**, answer **ONE** essay.

### Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- There are 40 marks for **Section A** and 40 marks for **Section B**.

### Advice

- You are advised to spend 1 hour on **Section A** and 1 hour on **Section B**.

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**Section A**

Answer **EITHER** Context 1 **OR** Context 2.

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**EITHER****Context 1****Total for this context: 40 marks****The pharmaceutical industry**

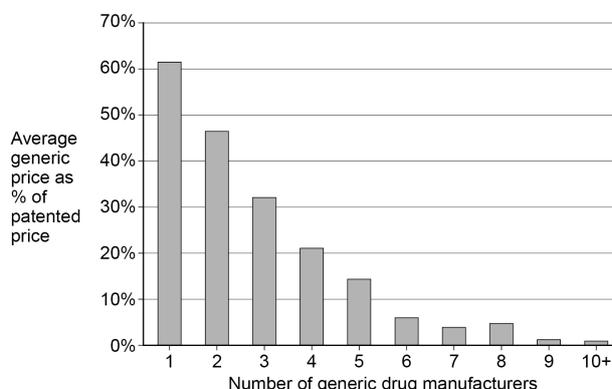
Study **Extracts A, B and C** and then answer **all** parts of Context 1 which follow.

**Extract A****Figure 1: Profitability of new patented drugs**

Year	Mean rate of return on new drugs (%)
2010	10.1
2011	7.6
2012	7.3
2013	4.8
2014	5.5
2015	4.2
2016	4.2
2017	3.7
2018	1.9
2019	1.8

Source: Deloitte report, 2019

**Note:** the mean rate of return is the average profit a pharmaceutical company can expect to make on a new drug over its lifetime, as a percentage of its development cost.

**Figure 2: Price of generic drugs compared to patented drugs, and number of manufacturers**

Source: Oxera report, 2019

**Note:** a generic drug is one which is no longer protected by a patent, and so can be made by any pharmaceutical firm, not only the original manufacturer.

**Extract B: Rising prices in the global pharmaceutical market**

Pharmaceutical drugs are very expensive to research and develop, costing an average of \$2.6bn. The most expensive, Zolgensma (a specialist gene therapy drug), costs \$2.1 million per patient. In order to encourage firms to invest in research and development, governments grant patents for new drugs. Patents preserve a company's intellectual property rights and give the company a legal monopoly that usually lasts for 20 years. Global drug prices have soared. The USA spent \$334bn on prescription drugs in 2017, up 41% from 10 years ago. Some price rises have been dramatic. The price of one antiparasitic drug, still protected by a patent, rose from \$13.50 to \$750 per pill. 1

After the monopoly's patent expires, other companies can manufacture and market the same drug under its generic name, usually at a lower price. For generic drugs, the UK government's policy is to rely on competition in the market between suppliers to control their price. Despite being a monopsony purchaser of these medicines in the UK, the NHS has relatively limited influence over their price in what is a global market. During 2017–18, the prices of certain generic drugs increased substantially, partly as a result of two large manufacturers having their production suspended because of quality issues. For example, the price of a generic mental health drug called Quetiapine peaked at £113.10 per 100mg, having previously cost £1.59. 5

During 2017–18, the prices of certain generic drugs increased substantially, partly as a result of two large manufacturers having their production suspended because of quality issues. For example, the price of a generic mental health drug called Quetiapine peaked at £113.10 per 100mg, having previously cost £1.59. 10

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The NHS budget of £138bn is not enough to meet all the demands for its services. Therefore, difficult allocation choices must be made. Rationing of care and treatment is inevitable. NHS spending on drugs in England has grown from £13bn in 2010–11 to £18.2bn in 2017–18, an average growth of around 5% per year. Policy on drugs in England aims to balance the competing goals of giving patients prompt access to effective treatments, incentivising the pharmaceutical sector to develop new products and ensuring that expenditure on drugs is affordable for the NHS. Today it is becoming harder to balance these objectives. 20

Source: News reports, 2019

### Extract C: Is the market for pharmaceuticals working well?

The market for most generic drugs is oligopolistic, with just two or three manufacturers making each product. This enables significant economies of scale within firms, but also presents the risk of consumer interests being harmed. In 2019, US regulators accused 20 firms of colluding to raise generic drug prices by as much as 1000%. Combined with the monopoly for those drugs protected by patents, high prices and profits prevail in many parts of the industry. 1  
5  
However, pharmaceutical firms argue that they take enormous financial risks in the search for new drugs. GlaxoSmithKline has spent just under £20bn on research and development over the past five years, while AstraZeneca spent nearly £30bn. These high development costs have led to new drugs becoming less profitable over the last decade. Pharmaceutical firms also provide thousands of highly skilled jobs and a reliable and safe product for consumers. 10  
Medicines and vaccines have played a crucial role in increasing UK life expectancy by 11 years since 1960. Over the last 40 years, cancer survival rates have doubled, and HIV/AIDS has been transformed into a manageable illness. UK firms are at the forefront of such developments and they make large profits in doing so. Many drugs have an extremely inelastic demand, as patients require them to maintain good health, which provides monopoly firms and collusive oligopolies with an opportunity to exploit their position. If this happens, the Competition and Markets Authority has the power to tackle the problem aggressively. 15

Source: News reports, 2019

- 0 1** Using the data in **Extract A** (Figure 1), calculate the mean amount of profit that pharmaceutical companies would have made on a new drug in 2019, given that the average development cost was \$2.6bn. Give your answer to the **nearest million dollars**. [2 marks]
- 0 2** Explain how the data in **Extract A** (Figure 2) show that greater competition leads to lower prices in the market for generic drugs. [4 marks]
- 0 3** **Extract B** (lines 9–10) states: ‘After the monopoly’s patent expires, other companies can manufacture and market the same drug under its generic name, usually at a lower price.’  
With the help of a diagram, explain why prices of pharmaceutical drugs supplied by a monopoly are likely to be higher than in markets which are more competitive. [9 marks]
- 0 4** **Extract C** (lines 1–3) states: ‘The market for most generic drugs is oligopolistic, with just two or three manufacturers making each product. This enables significant economies of scale within firms, but also presents the risk of consumer interests being harmed.’  
Using the extracts and your knowledge of economics, assess the view that the market structure of the pharmaceutical industry is damaging for consumers. [25 marks]

Turn over ►

Do **NOT** answer Context 2 if you have answered Context 1.

OR

Context 2

Total for this context: 40 marks

The ethnic pay gap

Study **Extracts D, E and F** and then answer **all** parts of Context 2 which follow.

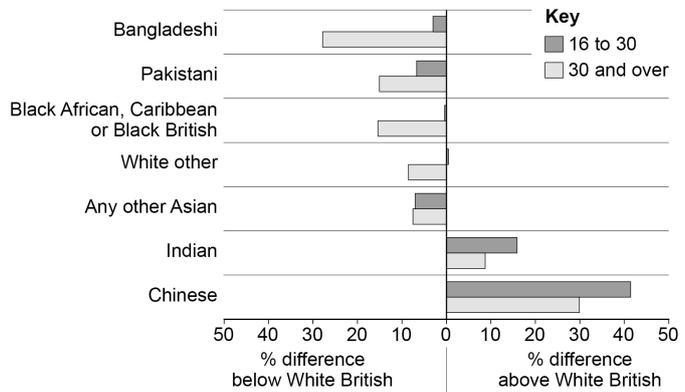
Extract D

Figure 3: Pay gap between ethnic groups and White British employees in the UK, 2018

Ethnic group	% pay gap compared with White British employees
Bangladeshi	-20.2
Pakistani	-16.9
Black African, Caribbean or Black British	-9.2
White other	-5.8
Any other Asian	-4.0
Indian	+12.0
Chinese	+30.9

Source: ONS, 2019

Figure 4: Pay gap between ethnic minority groups, by age, UK, 2018



Source: ONS, 2019

Extract E: The Ethnic Pay Gap

UK workers of Bangladeshi heritage have the lowest pay of any ethnic group, earning 20.2% less than White British workers. Analysis by the Office for National Statistics (ONS) shows significant pay gaps remain, even when education and occupation are taken into account, particularly for those born outside the UK. The median pay of White British workers last year was £12.03 an hour, compared with £9.60 for people of Bangladeshi ethnicity and £10.00 for those of Pakistani ethnicity. These groups also had the lowest employment rate. British-born employees of Chinese ethnicity earned the most of all groups, earning 30.9% more than White British workers. 1  
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Evidence suggests that the ethnic pay gap is reducing as the UK labour market evolves over time. People aged 16 to 30 from ethnic minority groups tended to have narrower pay gaps than older ethnic minority groups. For instance, the difference for the Bangladeshi ethnic group compared with White British workers was 3.1% among 16 to 30-year-olds but 27.9% for those over 30. Women in some ethnic groups were significantly less likely to be in the labour force than women in other ethnic groups. The ONS suggested that this could be a result of cultural differences as 38.1% of women from a Bangladeshi ethnic group and 32.1% of women from a Pakistani ethnic group were found to be economically inactive. This may be because they were looking after their family or home. 10  
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Source: News reports, 2019

**Extract F: Tackling the ethnic pay gap**

It is illegal to pay someone less for doing the same job based on their ethnicity. Andy Haldane, the Bank of England's Chief Economist, said that "the ethnicity pay gap problem in the UK is every bit as acute as the gender pay gap problem". A report by the management consultants, McKinsey, found that businesses with employees from the most diverse backgrounds were 15% more profitable than those firms with the least diverse workforce. A government report in 2017 suggested equal participation and progression across ethnicities could boost the UK's economy by an additional £24bn a year. BAME (Black, Asian or Minority Ethnic) workers are more likely to be in low-paid sectors such as catering, hairdressing and retail. These occupations have limited opportunities for workers to progress to more responsible, higher-paid roles. This may represent a misallocation of workers across the economy.

Only a handful of firms currently publish ethnic pay data. One of these, ITN, found that its BAME workforce were paid 21% less than White workers. The Conservative Government has indicated that it may introduce compulsory reporting of the ethnic pay gap for large firms. The Runnymede Trust said: "as well as getting companies to publish the ethnicity pay gap, you have to legally ask them to publish plans as to how they are going to close that gap. Otherwise, to be honest, nothing is going to happen". The government can ensure that public services such as the police and NHS provide such plans, but it is not intending to require all firms to do so. It could also take steps to recognise foreign qualifications, thus removing obstacles for well-qualified foreign-born workers. Others think the government should go further and consider ethnicity quotas on the management boards of major companies. In the absence of other reliable solutions, quotas could provide an urgent intervention to address the fact that currently only 4 of the biggest 100 listed companies are led by BAME executives, despite BAME groups accounting for 14% of the population. However, such quotas are rejected by some as discriminatory, patronising and inefficient, leading to the risk of government failure.

Source: News reports, 2019

- 0 5** Using the data in **Extract D** (Figure 3), calculate how much a worker of Bangladeshi ethnicity earned on average in 2018, given that a White British worker earned £28 677. Give your answer **to the nearest pound**. **[2 marks]**
- 0 6** Explain how the data in **Extract D** (Figure 4) show that the ethnic pay gap is more significant for older ethnic minority employees. **[4 marks]**
- 0 7** **Extract F** (lines 18–19) states: the Government 'could also take steps to recognise foreign qualifications, thus removing obstacles for well-qualified foreign-born workers.'  
With the help of a diagram, explain how UK firms not recognising foreign qualifications may lead to some ethnic groups receiving lower pay. **[9 marks]**
- 0 8** **Extract E** (lines 3–4) states: 'significant pay gaps remain, even when education and occupation are taken into account, particularly for those born outside the UK.'  
Using the extracts and your knowledge of economics, evaluate possible government policies to reduce the ethnic pay gap. **[25 marks]**

Turn over ►

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**Section B**

Answer **one** essay from this section.

Each essay carries 40 marks.

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**EITHER****Essay 1**

Price comparison websites were used to purchase 53% of car insurance policies in 2017, improving competition and reducing prices for consumers. In other sectors, dominant firms such as Amazon have used innovation to capture market share. In the UK, 70% of online consumers say that Amazon is the first online retailer they visit when buying goods.

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 Explain how perfect competition should lead to outcomes which are **both** productively and allocatively efficient. **[15 marks]**

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 Evaluate the view that technological change tends to bring industries closer to the market structure of perfect competition. **[25 marks]**

**OR****Essay 2**

Vaping, the use of e-cigarettes, is argued by many UK health experts to be a much less harmful substitute than smoking tobacco cigarettes. E-cigarettes contain fewer harmful chemicals such as tar, but they still contain addictive nicotine. The industry has been attacked for promoting sales amongst teenagers. This has led to San Francisco banning the sale of e-cigarettes.

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 Explain how the concept of cross elasticity of demand can be used to understand the relationship between markets. **[15 marks]**

1	2
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 Discuss the view that individual economic agents will always act as rational decision makers so as to maximise their utility. **[25 marks]**

**OR**

**Essay 3**

Aston Martin, the luxury car manufacturer, became a publicly listed company on the London Stock Exchange in October 2018, being valued at £3.89bn. The company had hoped to expand into new markets, enabling it to exploit economies of scale. However, following poor sales and weak profits, the company had lost 75% of its value by February 2020.

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 Explain how a firm may benefit from **both** internal and external economies of scale. **[15 marks]**

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 Discuss how the divorce of ownership from control may affect **both** the conduct and performance of firms. **[25 marks]**

**END OF QUESTIONS**

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**There are no questions printed on this page**

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