

# A-level **ECONOMICS**

Unit 3 Business Economics and the Distribution of Income

Monday 20 June 2016

Afternoon

Time allowed: 2 hours

# **Materials**

For this paper you must have:

- an AQA 12-page answer book
- a calculator.

# Time allowed

• 2 hours

# Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The Paper Reference is ECON3.
- 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.
- This paper is synoptic. It assesses your understanding of the relationship between the different aspects of Economics.
- You will be marked on your ability to:
  - use good English
  - organise information clearly
  - use specialist vocabulary where appropriate.

### Advice

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

PB/Jun16/E4 ECON3

### Section A

# Answer either Context 1 or Context 2.

**Total for this Context: 40 marks** 

# **Either**

### Context 1

### THE GLOBAL CONTEXT

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

Extract A: Selected countries' energy consumption by fuel type (measured in million tonnes oil equivalent), 2013

Fuel type	USA	UK	Russia	China
'Green' renewables (wind, solar, tidal)	59	11	0.1	43
'Green' renewables (hydro)	61	1	41	206
Nuclear	188	16	39	25
Coal	456	36	93	1925
Natural gas	671	66	372	145
Oil	831	70	153	507

Source: BP Statistical review of world energy, June 2014

# Extract B: Coal mining around the world

Over 6 billion tonnes of coal are currently produced annually worldwide. The top five coal producers are China, the USA, India, Australia and South Africa. We have become used to worrying about 'peak oil' (the time when oil starts to rapidly run out) and we describe fossil fuels as a 'finite' resource. However, in February 2015, scientists reported that trillions of dollars' worth of coal, oil and gas are available but should not be extracted if the global temperature rise is to be kept under the 2 degrees centigrade (2°C) safety limit agreed by leaders of the world's nations. If the scientists are correct, and if the politicians keep their word on the 2°C limit, then energy companies could be wasting their time and money in seeking out new, more expensive oil and gas sources. In 2013, fossil fuel companies spent over £400 billion on exploration.

This means, in effect, that unless some new technology is discovered to remove carbon emissions from coal when it is used, there is no future for coal mining. Many scientists say that coal should be the first fossil fuel industry to have its remaining reserves simply left underground. Some politicians are still sceptical of the science of climate change and claim that policies like that of abandoning fossil fuels would be bad for business, making energy unaffordable, affecting costs, and making industries uncompetitive. Others argue that the predicted effects of global warming, such as extreme weather events, droughts and flooding, would be even worse for business. However, it is still not clear whether the 2°C target can be achieved unless aircraft can find a new means of propulsion, all cars are run on electricity and coal fired power stations are urgently replaced by something else that will 'keep the lights on'.

Source: News reports, 2015

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### Extract C: Coal in the UK

There is no longer any significant deep mining in the UK, but there are numerous opencast sites operating. However, even if coal mining were stopped tomorrow, there would still be a legacy of environmental problems. Opencast mines use massive machines to strip the earth's surface to reach coal seams below. They can cover many square kilometres and typically have a life span of 20 years or more after which full restoration of the affected area should take place. However, according to a recent parliamentary debate, there are over 50 ex-opencast sites around the UK, many of which are important wildlife areas, where restoration has not happened, as the planning conditions have not been adequately enforced and the industry has not absorbed the costs of environmental damage.

Economists suggest that privatisation reduces government failure but increases market failure. However, in the case of opencast, these are occurring together. When the coal industry was privatised in the 1990s opencast operators were not required by law to put an adequate amount of money into independently managed restoration funds – a failure of regulation. Many companies have been using an unsustainable business model, relying on planning permission for a new opencast coaling scheme to pay for the restoration of a previous scheme. The collapse of prices on international coal markets has helped to create an environmental disaster.

In tackling environmental problems there is not really a straight choice between perfectly performing markets on the one hand, and wonderfully wise governments on the other.

The coal industry has been affected by many national and international policies, such as environmental taxes and carbon trading, but with a restoration funding shortfall of hundreds of millions of pounds, the 'polluter pays' principle does not operate within British opencast mining. As also appears to be the case with some other industries, the profits from coal are privatised, while the external costs stay in the public sector.

Source: News reports, 2015

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- Using Extract A, calculate, to two decimal places, the UK's coal consumption as a percentage of China's, and identify one other significant feature of the data shown.

  [5 marks]
- **O** 2 Explain what is meant by a "finite" resource' (**Extract B**, line 4) and analyse why it might be argued that environmental policies are 'bad for business' (**Extract B**, line 15).

  [10 marks]
- o 3 'In tackling environmental problems there is not really a straight choice between perfectly performing markets on the one hand, and wonderfully wise governments on the other.' (Extract C, lines 18–19).

Using the data and your knowledge of economics, assess the relative importance of market forces and government intervention in encouraging businesses to behave responsibly towards the environment.

[25 marks]

Do not answer Context 2 if you have answered Context 1.

Total for this Context: 40 marks

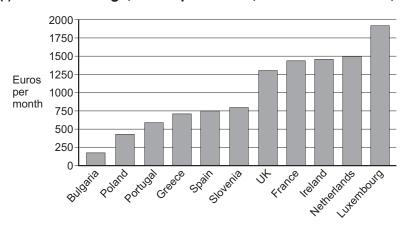
or

### Context 2

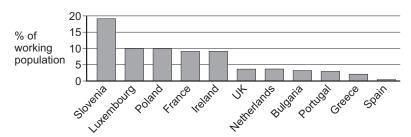
### THE EUROPEAN UNION CONTEXT

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

Extract D: Graph (i): Minimum wage, euros per month, selected countries, July 2013



Graph (ii): Percentage of working population receiving 105% or less of the minimum wage, selected countries, 2013



Source: http://ec.europa.eu/eurostat/statistics-explained/index.php/Minimum wage statistics

# **Extract E: Minimum wages in the EU**

Perhaps economists have traditionally had difficulty in discussing 'fairness', but during 2015 this topic was unavoidable as Greece, the UK, Spain and some other EU countries all had elections where equality, equity, tax avoidance, tax evasion, welfare, and the idea that the wealth of the highly paid can 'trickle down' to the low paid, were all critically discussed.

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Several of the founding EU member states have a history of operating a national minimum wage (NMW). A number, including Ireland, the UK and many newer members, have only relatively recently introduced minimum wage legislation, while seven of the EU-28 states had no NMW as of July 2014. In recent years, there has been a pattern of relatively low wage increases in most European countries, and trade unions claim that purchasing power and standards of living have fallen. NMW levels are not necessarily changed every year, nor does any adjustment always result in an increase. For example, the level of minimum wages in Greece decreased in 2012 as part of the austerity measures introduced by the government of the day. Some commentators support the idea of an EU-wide 'European minimum wage'.

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# Extract F: What is the living wage?

The living wage is an informal benchmark, not a legally enforceable minimum level of pay, like the national minimum wage. The NMW is set by the business secretary each year on the advice of the Low Pay Commission and is enforced by HM Revenue and Customs. The idea of a living wage is promoted by an independent body, the Living Wage Foundation. It has received widespread political support, but limited endorsement from employers. The living wage is based on the amount an individual needs to earn to cover the basic costs of living and lead a 'decent life'.

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The living wage is now set at £9.15 an hour in London and £7.85 an hour in the rest of the UK. By comparison, since October 2014, the NMW has been £6.50 an hour for adults aged 21 and over, and £5.13 for those aged 18 to 20. Assuming a 40-hour week, average 10 hourly earnings before tax for all full-time employees in April 2013 were £12.92.

At present, only a little more than 1000 employers have signed up to paying the living wage. They include some FTSE 100 companies such as Aviva and Barclays, and some large local authorities such as Cardiff and Newcastle. Some supporters of better pay for the low paid argue that employers who pay their staff too little are in effect being subsidised by taxpayers, through top-up state benefits such as tax credits. However, some companies, especially smaller ones, argue that paying the living wage could lead to job losses, and others say that they have been hit by the financial crisis and so could not increase staff costs to this level.

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After the general election of 2015, the Chancellor of the Exchequer, George Osborne, announced that the Conservative government would create a 'National Living Wage' which would rise to £9 an hour by 2020. This would apply only to workers aged 25 and over and be accompanied by a reduction in benefits for people in work. Opinion was divided on whether low paid workers would be better or worse off as a result.

Source: News reports, 2015

Using Extract D, Graph (i), calculate the Spanish minimum wage as a percentage 0 4 of that of the Netherlands, and identify one significant point of comparison between information in Graph (i) and information in Graph (ii).

[5 marks]

0 5 Explain the difference between 'equality' and 'equity' (Extract E, line 3), and analyse why, left to market forces, some workers will earn very low wages.

[10 marks]

0 6 'The living wage is based on the amount an individual needs to earn to cover the basic costs of living and lead a "decent life".' (Extract F, lines 6–7).

> Using the data and your knowledge of economics, assess whether the UK government should legislate to make the national minimum wage a living wage, or whether there are better ways of improving the earning power of the low paid.

> > [25 marks]

### Section B

Answer one essay from this section.

Each essay carries 40 marks

# Either

# Essay 1

'In the middle of the twentieth century, the UK had more than 20 large car producing companies, and countless small, local manufacturers, many of which also produced motorbikes and pedal cycles. Now there is no single car producer that is purely 'British' and, globally, there are probably fewer than 20 significant car producers in the world.'

**0 7** Explain how economic theory suggests that perfect competition among many small firms leads to an efficient allocation of resources.

[15 marks]

**0** 8 Evaluate whether growing market concentration and monopoly power, in an industry such as motor manufacturing, are necessarily undesirable.

[25 marks]

or

# Essay 2

'In the real world of business, two observations can consistently be made. Firstly, sooner or later, the law of diminishing returns will operate; and secondly, over time, profit maximising is always a key goal.'

**0 9** Explain the difference between diminishing returns to a factor in the short run, and returns to scale in the long run.

[15 marks]

**1 0** Evaluate the view that, for all firms, whether small or large, in the long run, profit maximisation is always more important than any other business objective.

[25 marks]

or

# Essay 3

'Most consumers know, more or less, when and why they are likely to want to replace a TV set or mobile phone. Nobody really knows in advance when or why they might need to go into hospital for a new knee-cap or hip joint.'

1 1 Explain why imperfect information might lead to market failure in the case of merit goods and demerit goods.

[15 marks]

1 2 Discuss whether economic welfare would necessarily be increased if the provision of merit goods and public goods were always left to governments without ever involving markets.

[25 marks]

**END OF QUESTIONS** 

# There are no questions printed on this page

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