Exam-style questions

1	The price of oil increased from \$100 to £125. If oil production rose by 3%, what is the best estimate for the price elasticity of supply for oil?	(1)
	A +0.12 B +0.25 C +1.2 D +8.33	
2	A sporting retailer knows that if it reduces the price of its tennis rackets from £50 to £45, the weekly sales of tennis balls will increase from 125 tubes to 140 tubes. Based on this information, which of the following is the best estimate of the cross-price elasticity of demand (XED) for tennis rackets and tennis balls?	(1)
	A +0.33 B -0.33 C -0.83 D -1.2	
3	A car manufacturer increases production from 2000 to 3000 cars a week. As a result, the total cost increases by £750000.	
	Given the information provided, what is the car manufacturer's marginal cost?	(1)
	A £75 B £250 C £375 D £750	
4	During the recession in the USA, disposable income per head fell by 8% and sales of board games such as Monopoly increased by 6%.	
	 Which of the following is the correct YED of board games? A -0.75 B +0.75 C +1.33 D -1.33 	(1)
	b Based on the information provided, explain whether board games are a normal or an inferior good.	(3)
5	The sterling—euro exchange rate increased from £1: \in 1.20 in December 2013 to £1: \in 1.28 in October 2014.	
	What is the percentage increase in the sterling—euro exchange rate over this period to the nearest per cent?	(1)
	A 6% B 7% C 8% D 10%	

6 Table E.1 shows the consumer price index between 2005 and 2008.

Table E.1

Year	Consumer price index (2005 = 100)
2005	100
2006	102.3
2007	104.7
2008	108.5

A worker who lost his job during the financial crisis had £2350 in his account in 2008. How much were his savings worth in real terms, to the nearest pound, using 2005 as the base period? (1)

- A £2166
- B £2245
- C £2350
- D £2550
- 7 An economic researcher constructed an index for the world oil price. The oil price was \$115 in June 2014 and this was set as the base time period.
 - a If the index is currently 48, calculate the current world oil price. (2)
 - **b** In percentage terms, by how much has the oil price fallen since 2014? (1)
 - A 48%
 - B 52%
 - C 55%
 - D 115%
- **8** Table E.2 shows the inflation rate and annual percentage change in average earnings over a period of 5 years.

Table E.2

10

Year	Inflation rate	Annual percentage change in average earnings
1	4.9	5.4
2	5.4	6.1
3	5.0	7.3
4	5.6	6.9
5	6.3	7.7

Which one of the following statements can be inferred from the table?

- (1)
- A The price level in the economy fell between years 2 and 3.
- B There is an upward trend in both the inflation rate and the rate of growth of average earnings over the period shown.
- C There is no evidence of cost-push inflation during this period.
- Profits for firms must have fallen between years 1 and 5.

9 Table E.3 shows the annual percentage change in GDP for a country over 4 years.

Table E.3

Year	Growth rate of GDP (%)
1	2.8
2	1.2
3	-0.8
4	-0.2

Which of the following can be concluded from the data?

(1)

- A GDP was falling throughout this period.
- **B** GDP continued to rise in year 2, but at a slower rate of growth compared to the previous year.
- C GDP in year 4 started to rise again.
- **D** The current account must have been in surplus during years 1 and 2.
- **10** With an identical amount of resources, country A can produce 20 tractors or 60 lorries, whereas country B can produce 15 tractors or 30 lorries.

Which of the following statements is correct?

(1)

- A The opportunity cost for country A of producing 1 tractor is 2 lorries.
- **B** For country B, the opportunity cost of producing 1 lorry is one-third of a tractor.
- **C** For country A, the opportunity cost of producing 3 lorries is 1 tractor.
- **D** Country A has the lower opportunity cost in the production of tractors.
- 11 Table E.4 shows tax revenue as a percentage of GDP and GDP at current US dollars for four different economies in 2012.

Table E.4

Country	Tax revenue as a percentage of GDP (%)	GDP at current US dollars (\$)		
Japan	10.1	5.95 trillion		
Pakistan	10.1	225 billion		
Thailand	16.5	366 billion		
Norway	26.8	510 billion		

Source: http://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS and http://data.worldbank.org/indicator/NY.GDP.MKTP.CD

From the data it can be inferred that, in 2012:

(1)

- A Norway had both the highest proportion of GDP collected as tax revenue and the highest GDP.
- **B** Japan and Pakistan both collected the same amount of money in tax revenue.
- C Thailand's total tax revenue was equivalent to approximately US\$60 billion.
- D Japan's GDP per head must be higher than that of the other countries.

12 The UK's 'big four' accountancy firms have often been under a high degree of scrutiny due to their dominance of the industry. The chart in Figure E.1 shows the market share of the top firms in the industry.

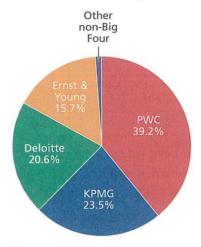


Figure E.1

Giving your answer to the nearest per cent, calculate:

- a the two-firm concentration ratio (2)
- b the four-firm concentration ratio (2)
- 13 Figure E.2 shows the breakdown of tax paid on a typical pint of beer in the UK. Giving your answer the nearest per cent, calculate the percentage of the pint made up of taxes.(4)

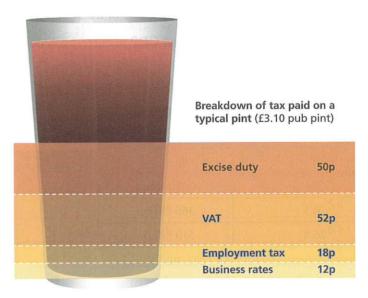


Figure E.2

14 Table E.5 shows the consumer price index for the UK economy in recent times.

Table E.5

	Consumer price index (May 2005 = 100)		
May 2013	126.1		
May 2014	128.0		
May 2015	128.2		

Source: ONS

Giving your answer to three significant figures, calculate the UK's annual rate of inflation in:

- **a** May 2014 (2)
- **b** May 2015 (2)
- 15 Researchers have found out the following about bus and rail travel in the UK:
 - Price elasticity of demand was estimated to be -0.40 for bus journeys and -0.50 for rail journeys.
 - Cross-price elasticity of demand between bus and rail travel was estimated at +0.10.

Using the information provided, calculate the percentage change in the number of bus journeys if:

- **a** bus fares were increased by 5% (2)
- b the price of rail journeys fell by 15% (2)
- 16 Table E.6 shows the number of unemployed people and the working population in selected UK regions. Calculate how much higher the unemployment rate is in the North East compared to London. Give your answer to three significant figures.
 (4)

Table E.6

Region	Total unemployed	Working population		
London	354 000	4370000		
North East	134 000	1 300 000		
North West	270 000	3 410 000		
South West	187 000	2750000		

Source: ONS

17 A self-published author has estimated the costs and revenues associated with different quantities of books sold online. The author is looking to pursue a policy of sales maximisation* to establish themselves in the market.

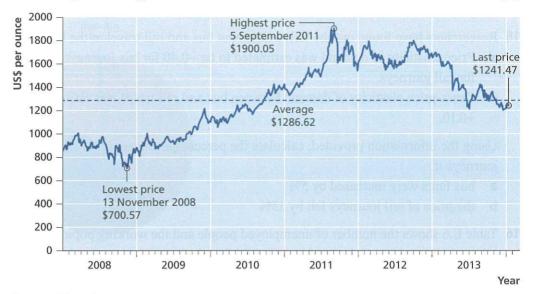
(*Sales maximisation is an objective where the firm tries to achieve the highest possible sales volume without making a loss.)

Table E.7

Quantity	Price	Total revenue	Profit or loss	Total cost	Marginal cost
5 000	£25			£50000	
7000	£20				7.5
9000	£15				10
11 000	£10				12.5
13 000	£5				20

Copy and complete Table E.7 to find the sales-maximising quantity for the author where only normal profits are made. (4)

18 The graph in Figure E.3 shows the gold price since 2008. Using 13 November 2008 as the base period, calculate an index number for 5 September 2011. Give your answer to three significant figures. (4)



Source: Bloomberg

Figure E.3

- 19 A cinema estimates that it receives 10 000 visitors a week if the average price of seeing a film is £5. The cinema then reduces its ticket price to £4 and sees its total revenue increase by £14 000. Calculate the price elasticity of demand for the cinema. (4)
- 20 Table E.8 shows median weekly earnings in different regions of the UK.

Table E.8

UK regions	Median gross weekly earnings (£) of full-time employees, April 2009			
United Kingdom	489			
North East	436			
North West	460			
Yorkshire and the Humber	451			
East Midlands	457			
West Midlands	456			
East of England	479			
London	627			
South East	514			
South West	454			
Wales	441			
Scotland	474			
Northern Ireland	439			

Source: ONS Statistical Bulletin 'Annual Survey of Hours and Earnings 2009', slightly adapted.

Using the data, describe the main differences in earnings of full-time employees between the regions of the UK in 2009. (5)

21 Table E.9 shows the price index for food compared to the price index for all other items over a period of 4 years.

Table E.9

Year	Index of food prices	Index of 'all other items' prices
1	100	100
2	105	104
3	108	103
4	112	107

Identify two significant points of comparison between changes in the index of food prices and changes in the index of 'all other items' prices over the period shown. (4)

22 With reference to Figure E.4, describe what happened to the value of the pound against the Deutschmark (Deutschmarks per pound — denoted DM/£) between 1987 and 1995.

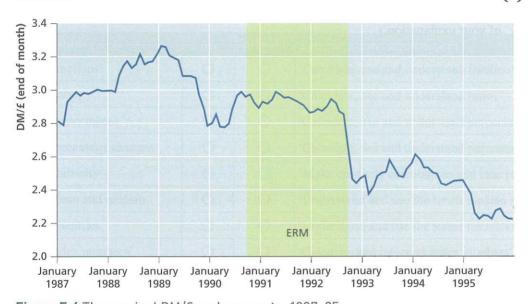


Figure E.4 The nominal DM/£ exchange rate, 1987-95

Note: the 'ERM' block on the graph refers to the UK's membership of the Exchange Rate Mechanism during this period. You do not need to know what this means to answer the question.

23 Table E.10 provides a summary of the effects of taxes and benefits on household income in the UK, organised by quintile groups, in the financial year 2013–14. Original income is income before the effects of taxation and benefits. Final income is income after the impact of taxation and benefits.

Table E.10

Average annual income per household	Bottom	2nd	3rd	4th	Тор
Original income	£5 521	£13 731	£24842	£40880	£80803
Final income	£15 504	£23 173	£28358	£36401	£60 027

Source: ONS Release 'The Effects of Taxes and Benefits on Household Income, Financial Year Ending 2014' (29 June 2015), data extracted from Figure 1.

Explain the impact on UK household income distribution, in 2013–14, of the tax and benefit system. (4)

(To do this, it would be helpful to calculate the ratio of average household income of the top quintile group compared to average household income of the bottom quintile group for both original income and final income. This is likely to improve the quality of your explanation.)