

# **PiXL Independence:**

## **Economics – Student Booklet**

### **KS4**

Style of All Exam Boards – Microeconomics

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- I. Introduction to Economics**
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## I. Introduction to Economics

*10 credits in total for this section.*

### Main Economic Groups and Factors of Production

1. State the four main economic groups and explain their roles. (8)
2. Using two of the economic groups, explain how they are interdependent of each other. (2)
3. State the four factors of production and their rewards. (4)
4. James has decided to become a farmer and has set up his own farm growing crops on the outskirts of Yateley. Using the four factors of production, give an example of each that would be utilised for James's farm. (4)
5. Explain the difference between a positive statement and a normative statement. (2)
6. Using your school as an example:
  - a. Give an example of a positive statement for the school. (1)
  - b. Give an example of a normative statement for the school. (1)

*15 credits in total for this section.*

### The Basic Economic Problem

7. What is the basic economic problem? (1)
8. Explain the difference between a 'need' and a 'want'. (2)
9. When attempting to solve the economic problem, what are the three key questions that need to be considered? (3)
10. Define 'opportunity cost'. (2)

11. Nelly has finished her GCSEs and is now weighing up whether to go to sixth form or take an engineering apprenticeship. Sixth form pays nothing whereas the engineering apprenticeship pays £100 per week. She decides to give sixth form a try first and will then decide what to do. What is Nelly's opportunity cost of going to sixth form for the first fortnight? (2)
12. Sam works as an accountant and earns £80 per hour. Sam has two clients who both require her services. One client, Alex, wants to sit down and go through his books for three hours which Sam can bill him for. The other client, Dylan, wants to get to know Sam better over food and drinks. Sam won't be able to bill Dylan for this and he thinks the night could end up costing her £120. What is Sam's opportunity cost of going for food and drinks with Dylan? (2)
13. Explain is meant by the following terms:
- a. Economic sustainability (1)
  - b. Social sustainability (1)
  - c. Environmental sustainability (1)
14. Transport for London have decided to extend the new tube line, the Elizabeth Line (aka Crossrail) to your town. Explain the impact on the following:
- a. Your town's economic sustainability (2)
  - b. Social sustainability (2)
  - c. Environmental sustainability (2)
15. Considering the economic, social and environmental impacts, evaluate the costs and benefits of the following decisions:
- a. The government goes ahead with the building of HS2 (6)
  - b. Your school decides to double the amount of students it will take in (6)
  - c. Many of the BBC's operations were moved from London to Salford (6)

- d. The government takes funds away from the police budgets and gives more money to firms building wind farms (6)

## II. The Role of Markets

20 credits in total for this section.

1. Define a 'market'. (2)
2. Explain what is meant by the following sectors and provide an example of each:
  - a. Primary sector (3)
  - b. Secondary sector (3)
  - c. Tertiary sector (3)
3. Using the table below, categorise the following professions into the correct sector (half mark for each). (7)

Primary	Secondary	Tertiary

Fisherman Shop Assistant Farmer Banker	iPhone Assembly Worker Vintage Car Builder Receptionist Miner
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Jeweller Lumberjack Teacher	Musician Call Centre Worker Car Salesman
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4. Explain how the primary, secondary and tertiary sectors are interdependent. (3)
5. Identify which sector contributes the most in terms of value to the UK economy. (1)
6. Explain why the sector contributes most to the UK economy. (2)
7. Explain the difference between factor markets and product markets. (2)
8. Provide an example of a factor market and a product market. (2)
9. Explain how factor markets and product markets are interdependent. (2)
10. Explain the difference between a good and a service. (2)
11. Below is a list of ten goods and services which contribute to the revenue of a football club. State whether they are a good or a service (half mark for each). (5)

<ol style="list-style-type: none"> <li>a. Burgers</li> <li>b. Sponsorship Deal</li> <li>c. Replica Kits</li> <li>d. Selling Players</li> <li>e. Match Programmes</li> <li>f. Season Tickets</li> <li>g. Renting out the Stadium</li> <li>h. Calendars</li> <li>i. Tours of the Stadium</li> <li>j. Mugs</li> </ol>	
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12. Explain what is meant by 'exchange'. (2)
13. Explain what is meant by the barter system. (2)

14. Define 'specialisation'. (2)
15. Adam Smith devised the division of labour theory. Describe the theory using Adam Smith's example from the pin factory. (4)
16. Using a car factory as an example, explain how specialisation is used. (2)
17. Evaluate the costs and benefits for a car producer using specialisation. (6)
18. Evaluate the costs and benefits for a car worker using specialisation. (6)
19. Tyneside used to specialise in shipbuilding, while the West Midlands used to specialise in car production. Evaluate the costs and benefits of a region specialising in a particular area. (6)
20. Countries also have particular specialities – for example, South Korea in high-end electronics, Saudi Arabia in oil and Germany in car production. Evaluate the costs and benefits of a country specialising. (6)

### III. Supply and Demand

*30 credits in total for this section.*

#### Demand

1. Define 'demand'. (2)
2. Explain the 'law of demand'. (2)
3. Explain the difference between 'individual demand' and 'market demand'. (2)
4. Explain the difference between a movement along the demand curve and a shift in demand. (2)
5. Explain what effect you think this factor will have on the demand of a good. The first has been completed as an example.

Income - If people are paid more, then they are likely to increase demand for a good or service. If their income falls, then they will be likely to reduce their demand for goods and services.

- a. Advertising (2)
- b. Price of substitutes (2)
- c. Fashion (2)
- d. Size of the population (2)
- e. Price of complements (2)
6. Draw demand shifts for each of the following scenarios and explain why demand has changed. (3 marks for each)
  - a. The average income of the UK consumer increases. Show what would happen to the demand for new cars.
  - b. The average income of the UK consumer increases. Show the demand for Sainsbury's Basic Baked Beans.



- c. Marmite's latest advert backfires causing animal lovers everywhere to boycott the product in protest.
- d. The price of tennis rackets falls by 20%; show the demand for tennis balls.
- e. Show the demand for the Samsung Galaxy S8 after the iPhone XS has been released.
- f. The weather this summer has been the hottest for several years. Show what the demand for BBQs was like.
- g. It is expected that the price of steel will rise considerably next year as the USA economy picks up pace. Show what will happen to the demand for new cars now with consumers expecting the prices to increase in coming years.
- h. Show the demand for cigarettes after the smoking ban was enforced.
- i. Show the demand for e-cigarettes after the smoking ban was enforced.
- j. Show the demand for DVDs as Blu-Rays become more affordable.

### Supply

- 7. Define 'supply'. (2)
- 8. State the 'law of supply'. (2)
- 9. Explain the three main reasons which create the law of supply. (6)
- 10. Explain the difference between 'individual supply' and 'market supply'. (2)
- 11. Explain two factors which will increase supply and two factors which will decrease supply (do not simply do the opposites – there must be four separate factors). (8)

Price

12. Explain the difference between the price of a good and its worth. (2)
13. Explain the following effects:
- a. Rationing function. (2)
  - b. Transmission of preferences. (2)
  - c. Signalling function. (2)

Diagram Checklist

- Am I using a ruler?
- Are the axes at least 7 lines?
- Have I labelled the axis with P, Q and 0?
- Have I labelled the supply and demand lines?
- Have I drawn on the dashed lines to show the equilibrium points?
- Have I labelled the dashed lines with P1, Q1, etc.?

- 14.
- a. Draw a supply and demand diagram. (3)
  - b. Explain what is happening at the equilibrium point. (2)
- 15.
- a. Draw a diagram showing excess supply. (3)
  - b. Explain why the market will eventually move back to equilibrium. (2)
- 16.
- a. Draw a diagram showing excess demand. (3)
  - b. Explain why the market will eventually move back to equilibrium. (2)

Using a separate diagram for each scenario, illustrate what would happen, **with a reason why (use correct economic terminology where applicable)**.

(3 marks for each diagram and 2 marks for each explanation).

17. The wildfires in California have caused millions of dollars' worth of grapes to be destroyed. Show what would happen to the market for wine.

18. Fidget spinners have been banned in schools across the country unless the student can provide a doctor's note for needing one. Show the market for fidget spinners.
19. Consumer incomes have fallen in real terms again. Show the market for Waitrose goods.
20. Consumer incomes have fallen in real terms again. Show the market for Aldi goods.
21. Monarch has gone out of business while Ryanair has cut back on its number of flights. Show the market for short haul flights in Europe.
22. The demand for new cars has decreased. Show the market for steel.
23. The iPhone XS has just been released. Show the market for the iPhone 8.
24. More people are turning vegetarian.
  - a. Show the market for beef.
  - b. Show the market for leather.
25. The new Call of Duty has just been released.
  - c. Show the market for PlayStations.
  - d. Show the market for PlayStation controllers.
26. The US government has scrapped the subsidy for biofuel. Show the market for wheat.
  
27. As the world population grows, more people are eating chocolate. At the same time, the warmer weather is decreasing the number of areas that can grow cocoa. Show the market for chocolate.
28. The sugar tax has taken effect. It has also been announced that bottled water is now the most popular drink as people don't like fizzy drinks any more. Show the market for Coca Cola.
29. Draw a diagram for beer following a cut in beer duty (tax) and a campaign by the government telling people about the dangers of drinking.

30. Use the data below to construct a supply and demand diagram for the market for cans of Coca Cola. (4)

PRICE (pence)	QUANTITY SUPPLIED (millions)	QUANTITY DEMANDED (millions)
20	100	1000
40	200	900
60	300	800
80	400	700
100	500	600
120	600	500
140	700	400
160	800	300
180	900	200
200	1000	100

31. Since these figures were completed, the price of aluminium has risen substantially. Therefore, Coca Cola has decided to cut production by 15%. Draw the new supply curve on your diagram. (2)
32. How has this affected the price and quantity of Coca Cola in the market? (2)
33. The Coca Cola truck visiting towns and cities across the UK is predicted to increase demand for Coca Cola by 10%. (2)
34. Draw on your graph the predicted demand curve. How has this affected the price and quantity of Coca Cola in the market? (2)
35. Draw a horizontal line to highlight Coca Cola charging £1.80 per can. Explain what would happen if Coca Cola were to do this. (3)
36. Coca Cola are thinking about expanding into France. Analyse three factors which Coca Cola will need to consider when expanding abroad. (6)

## IV. Elasticity

*30 credits in total for this section.*

1. Define price elasticity of demand (2)
2. What is the formula to calculate PED? (2)
3. What is the formula for calculating a percentage change? (2)
4. Why is PED always negative? (2)
5. What is meant by the following:
  - a. Price elastic (2)
  - b. Price inelastic (2)
  - c. Unitary elasticity (2)
  - d. Perfectly elastic (2)
  - e. Perfectly inelastic (2)
6. State 3 examples of price inelastic goods and 3 examples of price elastic goods. (6)
7. State 3 factors that make a good price inelastic and 3 factors that make a good price elastic. (6)
8. What is meant by 'breadth of definition'? (2)
9. Explain an example of breadth of definition. (2)

10. Draw a demand curve for the following:
- a. Price elastic (2)
  - b. Price inelastic (2)
  - c. Unitary elasticity (2)
  - d. Perfectly elastic (2)
  - e. Perfectly inelastic (2)
11. Toby runs a shop selling tomatoes; he increases the price by 10% but sees demand fall by 30%. Calculate the PED. (2)
12. Matt is a door to door salesman selling car mats as part of the Matt's Mats franchise. Matt decreased the price of his mats by 15% and saw demand increase from 60 mats per week to 70 mats per week. Calculate the PED. (2)
13. Zac has a business selling shoe racks called Zac's Racks. Zac decreases the price of a rack from £25 to £22 and sees demand rise from 790 to 950. Calculate the PED. (2)
14. Will runs a business called Will's Tills selling tills. He has estimated that the PED for his tills is -0.7. Will is thinking of the following price changes. Calculate the demand change for each. (2)
- a. 20% price rise (2)
  - b. 10% price rise (2)
  - c. 5% price fall (2)
15. Sam has opened a butcher's called Sam's Hams. Sam sold his hams for £7.50 and sold 190 per week. He then raised the price to £8 and demand fell to 160. Calculate the PED. (2)

16. Cael works on a farm and sells off his excess hay bales under the business name Cael's Bales. The elasticity for the hay was -1.6. Cael saw a rise in demand of 20%. How much did Cael reduce the price of his hay bales by? (2)
17. Nick has opened up a football coaching school called Nick's Kicks. Nick currently charges £5 per session and has 20 attendees.
- a. Calculate the revenue (2)
- b. Draw a demand curve (only) to show this (2)
18. Nick then increases the price to £6 and the attendance falls to 17.
- a. Calculate the PED (2)
- b. Calculate the revenue (2)
19. Gab has his own petrol station called Gabz Garage. The price of petrol increases from £1.10 per litre to £1.13 and Gab sees demand fall by 0.5%.
- a. Calculate the PED (2)
20. Gab originally sold 60,000 litres of petrol when the price was £1.10.
- a. Calculate the revenue at £1.10 (2)
- b. Calculate the quantity sold at £1.13 (2)
- c. Calculate the revenue at £1.13 (2)
- d. Draw a demand diagram to illustrate the changes in revenue (2)
21. Explain why it is important for consumers to know the price elasticity of demand of a product. (2)
22. Explain why it is important for producers to know the price elasticity of demand for their product. (2)

23. Define price elasticity of supply. (2)
24. Draw a supply curve showing inelastic supply. (2)
25. Explain what is meant by inelastic supply. (2)
26. Explain three factors which may make supply inelastic. (6)
27. Draw a supply curve showing elastic supply. (2)
28. Explain what is meant by elastic supply. (2)
29. Explain three factors which may make supply elastic. (6)
30. Draw a perfectly elastic supply curve. (2)
31. Explain what is meant by perfectly elastic supply. (2)
32. Draw a perfectly inelastic supply curve. (2)
33. Explain what is meant by perfectly inelastic supply. (2)
34. Give an example of a good which may be perfectly (or very nearly) inelastic. (1)
35. Draw a supply curve showing unitary elasticity. (2)
36. Explain what is meant by unitary elasticity. (2)
37. Explain why it is important for consumers to know the price elasticity of supply of a product. (2)
38. Explain why it is important for producers to know the price elasticity of supply for their product. (2)



39. Bobby has a sweet factory which produces mainly gobstoppers called Bobby's Gobbies. There has been a big spike in demand for gobstoppers since Kim Kardashian was pictured with one. Bobby was originally producing 20,000 gobstoppers per week while the price was £1. The market price for gobstoppers has risen to £1.15 and Bobby has increased production to 25,000 per week.
- a. Calculate the PES. (2)
- b. Explain one reason that may have caused this PES figure. (2)
40. Filo runs his own farm called Filo's Farm. The price of wheat has risen significantly and Filo plans to increase wheat production in the long run but can't do it in the short run. Explain why the elasticity of wheat production changes over time. (4)
41. Liam operates a factory producing prosthetic legs called Liam's Legs. The price hospitals are willing to pay for the basic wooden legs has risen from £500 per leg to £650 per leg. Liam ramps up production from 100 legs per week to 175 legs per week. Calculate the PES. (2)
42. Liam also produces bionic legs for hospitals. The price for these has also risen. The price has increased from £3,000 to £4,000. Liam's bionic legs have a PES of 1.1. Calculate the percentage change in the number of bionic legs Liam produced. (2)
43. Explain one reason why the PES of Liam's two products may be different. (2)
44. Explain why the elasticity of new housing changes over time. (4)
45. Explain one way in which the government could make new housing more elastic. (2)

46. Zack produces zinc. The market price is £1,600 per tonne and Zack produces 500 tonnes. The market price rises to £1,900 per tonne but Zack only increases production to 510 tonnes. Calculate the PES. (2)
47. Explain why Zack may not have increased production by much. (2)
48. Transport for London states “Peak fares apply Monday to Friday (not on public holidays) between 06:30 and 09:30, and between 16:00 and 19:00.” Peak rail fares are considerably higher than off-peak rail fares.
- Explain why rail companies are able to charge higher prices depending on the time of day. (2)
49. The railways are already at full capacity. Explain whether the price elasticity of supply for the railways will be elastic or inelastic. (2)
50. Using a supply and demand diagram and taking elasticity into account, illustrate the effects of the UK’s population increase on the railways. (3)

## V. Competition

*20 credits for this section*

1. Explain what is meant by competition. (2)
2. Explain three reasons why producers compete within markets. (6)
3. State eight methods which producers use to compete in markets. (8)
4. Using the car market as an example, explain three methods which car manufacturers use to compete against each other. (6)
5. Using the mobile phone market as an example, evaluate how mobile phone manufacturers compete against each other. (6)
6. Explain how high levels of competition will generally affect prices within the market. (2)
7. Illustrate how high levels of competition can affect the market with a supply and demand diagram. (3)
8. Analyse the impact of increased competition on the market for a good with a low PED. You should use a supply and demand diagram to support your answer. (6)
9. Analyse the impact of increased competition on the market for a good with a high PED. You should use a supply and demand diagram to support your answer. (6)
10. Evaluate why increased competition may not always lead to lower prices within a market. (6)
11. Analyse the impact of increased competition on producers. (4)
12. Analyse the impact of increased competition on consumers. (4)
13. Complete the tables below:
  - a. Monopoly: (6)

Size of firm	
Number of firms	
Does the firm have any control over prices?	
Price within the market (low or high)	
How efficient are the firm(s) within the market?	
Provide three real world examples	

b. Oligopoly

(6)

Size of firm	
Number of firms	
Does the firm have any control over prices?	
Price within the market (low or high)	
How efficient are the firm(s) within the market?	
Provide three real world examples	

c. Competitive Market (6)

Size of firm	
Number of firms	
Does the firm have any control over prices?	
Price within the market (low or high)	
How efficient are the firm(s) within the market?	
Provide three real world examples	

14. Explain what is meant by monopoly. (2)
15. Explain two reasons why a monopoly may have been created. (4)
16. Explain why a monopoly such as Thames Water may be necessary. (2)
17. Virgin Trains has a monopoly on the West Coast railway.
- a. Explain what is meant by a monopoly for Virgin Trains. (2)
- b. Explain the consequences of this for consumers of the railway. (4)
- c. Explain how this may affect Virgin Trains. (4)

18. Microsoft has a monopoly on the operating system market with over 80% of the market:
- a. Explain how the effects of a monopoly for Microsoft may be different to that of Virgin Trains. (2)
  - b. Explain the difference between a working monopoly and a pure monopoly. (2)
19. Explain what is meant by an oligopoly. (2)
20. Explain why some oligopolies such as the grocery market are more competitive than other oligopolies such as the energy market. (4)
21. Explain how the competition between supermarkets affects consumers. (4)
22. Explain the impact this competition has on the supermarkets. (4)
23. Explain what is meant by a cartel. (2)
24. Explain what is meant by a competitive market. (2)
- The town of Woking has over 20 pubs and bars.
25. Explain what kind of market this is and why. (2)
26. Analyse how the competition between pubs and bars will affect consumers. (4)
27. Analyse the impact this competition has on the pubs and bars in Woking. (4)

28. Analyse why a firm in a competitive market is likely to be more efficient than a monopoly. (4)

Research Task

1. Find an example of a monopoly in the UK
2. What are the market shares of the firms in that market?
3. What has happened to prices and other factors in that market?
4. Why do you think that has happened?
5. Research the market shares of the supermarkets
6. Research the market shares of the energy companies
7. What has happened to prices set by supermarkets compared to the energy companies?
8. Why has this happened?
9. What is the CMA?
10. What is the role of the CMA?
11. How does the CMA promote competition?
12. What action can the CMA take?
13. What specific action has the CMA taken in the energy market?
14. Restaurants are an example of a competitive industry. Research and write down a selection of different restaurants in your area.
15. Why do restaurants sometimes choose to compete on non-price factors rather than price? Give examples in your answer.

## VI. Production

*25 credits for this section.*

1. With an example, explain how each of the following can be considered to be producers:
  - a. Individuals (3)
  - b. Firms (3)
  - c. Government (3)
2. Explain the difference between production and productivity. (3)
3. Explain how an increase in production can affect the following:
  - a. The producer (2)
  - b. Consumers (2)
  - c. The economy (2)
4. Analyse why increased productivity is important to a producer. (4)
5. Analyse why increased productivity is important to an economy. (4)
6. Analyse why increased productivity is important to a government. (4)
7. Evaluate how a car manufacturer may be able to increase productivity. (6)
8. Define the following terms and provide the formula where necessary (one mark for each):
  - a. Costs
  - b. Fixed costs
  - c. Variable costs
  - d. Total costs (formula required)
  - e. Average costs (formula required)
  - f. Total revenue (formula required)
  - g. Average revenue (formula required)
  - h. Profit (formula required)
  - i. Loss



11. Claire runs her own café. Below is a list of costs she incurs. Separate the costs into fixed and variable costs (half a mark for each):

Coffee  
 Plastic cups  
 Coffee machine  
 Chairs  
 Milk  
 Claire's unlimited minutes and texts phone contract  
 Claire's salary  
 Wages for the junior staff  
 Insurance for the café  
 The café Sign


12. Tim runs a t-shirt factory. State whether each cost is fixed or variable with an explanation as to why it is fixed or variable (two marks for each):

T-Shirt fabric –  
 Buttons for the T-Shirts –  
 Factory staff wages –  
 Factory insurance –  
 Paint for the shop sign –  
 Monthly internet bill –  
 Staff salaries –  
 Tim's car insurance –  
 T-Shirt printing machine –  
 Thread for the T-Shirt logo –

13. Bella runs a bakery called Bella's Bakery. Bella sells bread for £1 per loaf. The dough costs 50p and the packaging costs 10p. The rent for her bakery is £100 per week.

Bella produces 80 loaves of bread per day. She usually sells 60 at full price but the last 20 loaves of the day she has to sell for a 20% discount.

Calculate the following for a week:

Total Fixed Costs	
Total Variable Costs	
Total Costs	
Total Revenue	
Average Revenue	
Profit/Loss	

14. Toby runs a business printing band t-shirts. It costs £2.50 to produce each t-shirt and Toby's fixed costs total £500. Toby sells each t-shirt for £10. Complete the following table:

Output	Variable Cost	Fixed Cost	Total Cost	Average Cost	Revenue	Average Revenue	Profit/ Loss
0							
100							
200							
300							
400							
500							

15. Crossrail is the new high frequency, high capacity railway for London and the south-east overseen by Transport for London (TfL). When the service opens Crossrail trains will travel from Reading in the west, through central London to Shenfield in the east. Crossrail was conceived in 2000 with construction beginning in 2009. Crossrail is nearing completion with the costs increasing from £14.8bn to £15.4bn.
- State four costs that TfL will have incurred. (4)
  - Calculate the percentage change in Crossrail's budget. (2)
  - Explain one reason why Crossrail may have gone £600m over budget. (2)
  - Analyse the impact of going over budget for TfL. (4)

- e. Explain one impact of going over budget for consumers. (2)
16. Using a supply and demand diagram to support your answer, evaluate the impact of an increase in the minimum wage on local restaurants in your area. (6)
17. Amazon became a public limited company in 1997. It made its first quarterly profit in 2001. Amazon has always been a highly sought after company to invest in despite not making the profits that investors seek. However, it has always made high levels of revenue.
- Evaluate the importance of revenue to producers such as Amazon. (6)
18. Apple is a highly profitable company with a net profit of over \$59bn last year and it made net profits of over \$1bn for the last 18 years. While Apple is not first to market with products such as mp3 players, touchscreen phones and tablets, it has always proved that they can be highly profitable products.
- Evaluate the importance of profit to companies such as Apple and the electronic markets. (6)
19. Tesco reported a loss of £6.4bn for 2015, one of the largest in UK history. However, Tesco still remains the UK grocery market leader.
- Evaluate the impact of making a loss for a company such as Tesco. (6)
20. Evaluate whether a loss-making firm should cut costs or increase revenue. (6)

21. Define and provide an example for each of the following (two marks for definition and one mark for example):
- a. Internal economies of scale
  - b. Technical economies of scale
  - c. Economies of increased dimensions
  - e. Purchasing economies of scale
  - f. Financial economies of scale
  - g. Managerial economies of scale
  - h. Marketing economies of scale
  - i. Risk-bearing economies of scale
  - j. Research and development economies of scale
  - j. External economies of scale
  - k. Identify three ways in which a firm can benefit from external economies of scale

(3)

22. Nissan has a car manufacturing plant based in Sunderland It directly employs over 7,000 employees. Using the eight types of internal economies of scale listed above (b-i) and external economies of scale, explain how Nissan can benefit from each type (two marks per explanation).

- b. Technical economies of scale
- c. Economies of increased dimensions
- d. Purchasing economies of scale
- e. Financial economies of scale
- f. Managerial economies of scale
- g. Marketing economies of scale

- h. Risk-bearing economies of scale
  
- i. Research and development economies of scale

Internal economies-

The following questions may require you to research the answers.

- 23. Explain how increased dimensions economies resulted in decreased profitability for shipping container firms such as Maersk. (4)
  
- 24. Explain how Formula One teams have benefited from external economies of scale. (4)
  
- 25. Explain how pharmaceutical firms benefit from research and development economies. (4)
  
- 26. Explain how Tesco will benefit from purchasing economies compared to a local newsagent. (4)

## VII. The Labour Market

*30 credits for this section.*

1. Use the internet and collect the following information:

<b>Occupation</b>	<b>Average Salary (UK)</b>	<b>Quantity in UK</b>	<b>Requirements to enter profession</b>
Nurse			
PL Footballer			
Teacher			
Soldier			
Civil Engineer			
Investment Banker			
Police Officer			
Software Developer			
Medical Doctor			

Shop Assistant			
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2. Using your research above, explain why there are differences in the average salary of the professions above. You should compare at least four professions. (6)
3. Explain what is meant by the labour market. (2)
4. Explain why an economy has a labour market. (2)
5. With examples, explain what is meant by the following:
  - a. Local labour market. (2)
  - b. Regional labour market. (2)
  - c. National labour market. (2)
  - d. International labour market. (2)
6. Apart from the geographical, state two other ways in which labour markets can be divided up. (2)
7. State five pieces of information an employer will need to communicate to the labour market when looking to hire new employees. (5)
8. Define the following key terms:
  - a. Geographic immobility
  - b. Occupational immobility.
  - c. Trade union.

The demand for labour is considered to be 'derived demand' – i.e. the demand for labour comes from the demand for goods and services. Firms will only hire if they expect and/or have demand for their products.

9. Explain what is meant by the demand for labour. (2)



10. Explain what is meant by derived demand. (2)
11. Draw a demand for labour curve. (2)
12. On the demand curve, show the following:
  - a. Show a contraction in demand with an explanation about what has caused the contraction in the demand for labour. (2)
  - b. Show an expansion in demand with an explanation as to what has caused the expansion in the demand for labour. (2)
13. Explain how each of the following factors may increase or decrease the demand for labour:
  - a. The performance of the economy. (2)
  - b. Increased/decreased demand for a good/service. (2)
  - c. Price of the good. (2)
  - d. Real wages. (2)
  - e. Productivity of labour. (2)
  - f. Profitability of the companies. (2)
  - g. Technology used by the companies. (2)
  - h. Employment subsidies from the government. (2)
14. Explain what is meant by the supply of labour. (2)
15. The UK population is currently 65 million.,However, not all 65m are counted as part of the supply of labour.  
  
State and explain five groups of people who do not count towards the supply of labour. (5)
16. Draw a supply of labour curve. (2)

17. On the supply curve, show the following:
- a. Show a contraction in supply with an explanation as to what has caused the contraction in the supply of labour. (2)
  - b. Show an expansion in supply with an explanation as to what has caused the expansion in the supply of labour. (2)
18. Explain how each of the following may increase or decrease the supply of labour:
- a. Other monetary payments. (2)
  - b. Size of the working population. (2)
  - c. Non-monetary factors. (2)
  - d. Barriers to entry. (2)
  - e. Education and training. (2)
19. **Draw supply and demand for labour** diagrams for the following scenarios:
- ai. The government has approved hundreds of new housing projects across the country. This has caused an increase in the demand for builders. (2)
  - aii. What has happened to the wage rate? Why? (2)
  - aiii. What has happened to the quantity of labour? Why? (2)
  
  - bi. The government has announced it will cut back spending on the armed forces. (2)
  - bii. What has happened to the wage rate? Why? (2)
  - biii. What has happened to the quantity of labour? Why? (2)
  
  - ci. The government has ended its visa cap for doctors and nurses. (2)
  - cii. What has happened to the wage rate? Why? (2)

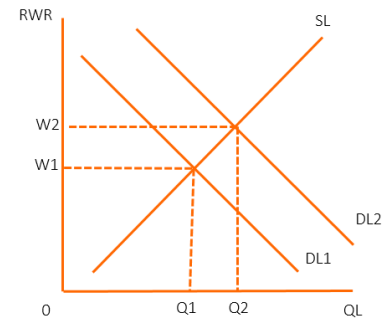
- ciii. What has happened to the quantity of labour? Why? (2)
- di. Uber drivers will now need to have background checks before joining the company. (2)
- dii. What has happened to the wage rate? Why? (2)
- diii. What has happened to the quantity of labour? Why? (2)
  
- 20. Define the elasticity of demand for labour. (2)
- 21. What is meant by inelastic demand for labour? (2)
- 22. What is meant by elastic demand for labour? (2)
- 23. State two factors that make the labour demand inelastic. (2)
- 24. State two factors that make the labour demand elastic. (2)
- 25. Identify two occupations where the demand for labour will be inelastic. (2)
- 26. Identify two occupations where the demand for labour will be elastic. (2)
- 27. Define the elasticity of supply of labour. (2)
- 28. What is meant by inelastic supply of labour? (2)
- 29. What is meant by elastic supply of labour? (2)
- 30. State two factors that make supply of labour inelastic. (2)
- 31. State two factors that make supply of labour elastic. (2)
- 32. Identify two occupations where the supply of labour will be inelastic. (2)
- 33. Identify two occupations where the supply of labour will be elastic. (2)
- 34. Draw a diagram showing the market for Premier League footballers (consider the elasticity when drawing the diagram). (2)
  
- 35. Draw a diagram showing the market supermarket checkout assistants (consider the elasticity when drawing the diagram). (2)

36. Below are nine scenarios. Draw a diagram showing the impact on supply and/or demand for labour with a reason why (two marks for the diagram and two marks for the explanation).

The first one has been done for you.

- a. Phil runs a fidget spinner factory called Phil's Fidgets. It's 2015 and the demand for fidget spinners has greatly increased.

The demand for labour would increase. Phil has seen increased demand for his fidget spinners and therefore needs more labour to produce the extra spinners.



- b. Several restaurant companies such as Prezzo, Jamie's Italian, Byron and Carluccio's have already closed restaurants due to rising prices and more chains are forecast to follow. Explain the impact on the restaurant labour market.
- c. Immigration continues to rise in the UK with the population now over 65 million. Explain the impact on the UK labour market.
- d. The government's apprenticeship programme has been a success with more people qualifying as engineers. Explain the impact on the engineering market.
- e. Infrastructure and housing in the south west of England is poor. Explain the impact of the south-west labour market.
- f. Oil is a very inelastic good and the price of oil is rising fast once again due to Middle Eastern tension. Explain the impact on the oil drilling labour market.

- g. More and more car companies are using robots to produce cars. Explain the impact on the car manufacturing labour market.
- h. More families are moving to the town of Milton Keynes. Explain the impact on the teacher market in Milton Keynes.
- i. UK banks are once again very profitable and are also handing out big bonuses. Explain the impact on the banking labour market.

- 37. Explain what is meant by gross pay. (2)
- 38. Explain what is meant by net pay. (2)
- 39. Explain the difference between a wage and a salary. (2)
- 40. Explain what is meant by a deduction. (2)
- 41. Provide three examples of possible deductions an employee may have. (3)

### Extension – Research Task

Research the following:

#### Income Tax

1. What is income tax?
2. What are income tax bands?
3. What are the income tax bands in the UK for 2018/19?
4. If someone earns £10,000 per annum, how much income tax will they pay?
5. If someone earns £30,000 per annum, how much income tax will they pay?
6. If someone earns £50,000 per annum, how much income tax will they pay?

#### National Insurance

7. What is national insurance?
8. Why do we pay national insurance?
9. Most employees are classified under the class 1a. What are the contribution rates for class 1a?

#### Pension Contributions

10. What is a 'pension'?
11. Explain why we make pension contributions.

#### Student Loan

12. What are student loans?
13. Explain why we make student loan repayments.

14. Tom works at Tesco earning the minimum wage. Here's Tom's payslip for May below. Calculate Tom's gross and net pay.

<u>Payments</u> Hours worked – 160	Hourly rate - £4.20	<u>Deductions</u> None
Gross pay -		Net pay -

15. Sam is a high flying marketing executive. Calculate his gross pay and net pay.

<u>Payments</u> Salary - £6,000 Bonus - £1,000	<u>Deductions</u> Income tax - £700 National insurance - £400 Pension contribution - £500
Gross pay -	Net pay -

16. Sandra works in a call centre and does a lot of overtime. Calculate her gross pay and net pay.

<u>Payments</u> Hours worked – 140	Hourly rate - £5.90	<u>Deductions</u> Income tax - £50 National insurance - £30
Overtime hours worked - 40	Overtime rate –Time and a half	
Normal hours pay - Overtime pay - Gross pay -		Net pay -

### Extended Tasks

Callum has an annual salary of £100,000.

Calculate the following:

1. His monthly earnings
2. The amount of income tax he will pay:
  - a. Annually
  - b. Monthly
3. The amount of national insurance he will pay:
  - a. Annually
  - b. Monthly
4. Create a monthly payslip similar to the one you've filled in to reflect the figures

Dan earns £4,000 per month.

Calculate the following:

5. His annual salary
6. The amount of income tax he will pay:
  - a. Annually
  - b. Monthly
7. The amount of national insurance he will pay:
  - a. Annually
  - b. Monthly
8. Create a monthly payslip similar to the one you've filled in to reflect the figures

Matt earns £18,000 per year.

Calculate the following:

9. His monthly earnings
10. The amount of income tax he will pay:
  - a. Annually
  - b. Monthly
11. The amount of national insurance he will pay:
  - c. Annually
  - d. Monthly
12. Create a monthly payslip similar to the one you've filled in to reflect the figures



## VIII. The Role of Money and the Financial Markets

*30 credits for this section.*

1. Explain what is meant by money. (2)
2. Explain the following payment methods:
  - a. Cash. (2)
  - b. Debit cards. (2)
  - c. Credit cards. (2)
  - d. Cheque. (2)
  - e. Bartering. (2)
3. Explain what is meant by medium of exchange. (2)
4. State and explain the four functions of money. (8)
5. Explain what is meant by legal tender. (2)
6. Research what is stated as legal tender in the UK.
7. Explain what is meant by the financial sector. (2)
8. Explain the role of the financial sector. (2)
9. Explain what is meant by a commercial bank. (2)
10. Explain commercial banks' main activities. (6)
11. State five of the main commercial banks in the UK. (5)
12. Explain what is meant by a building society. (2)
13. Explain how it differs from a commercial bank. (2)
14. Explain why there are fewer building societies than there were 40 years ago (2)
15. Explain the main activities of a building society. (6)
16. Give examples of three building societies in the UK. (3)
17. Explain what is meant by an insurance company. (2)

18. Explain the main activities of insurance companies. (4)
19. Give examples of the main insurance companies in the UK. (3)
20. Explain six of the main roles of the Bank of England. (12)
21. With a numerical example, explain the traditional method which commercial banks use to make a profit (hint: taking savings and providing loans). (4)
22. Using the following factors as a basis for your answer, evaluate the importance of the financial sector for producers: providing credit, providing liquidity, managing risk. (6)
23. Evaluate the importance of the financial sector for the government. (6)
24. Research the causes of the 2008 financial crisis.
25. Explain what is meant by liquidity. (2)
26. Put the following in order of their liquidity: property, cash, shares. Explain your answer. (4)
27. Define interest rates. (2)
28. Define the bank rate. (2)
29. Complete the following table: (4)

When the Bank Rate:	Effect on borrowing and why	Effect on saving and why
Increases		
Decreases		

Calculate the following (simple interest for all):

30. Dom puts £10,000 into a bank account for one year and receives 5% interest. Calculate the amount of interest Dom would receive. (2)

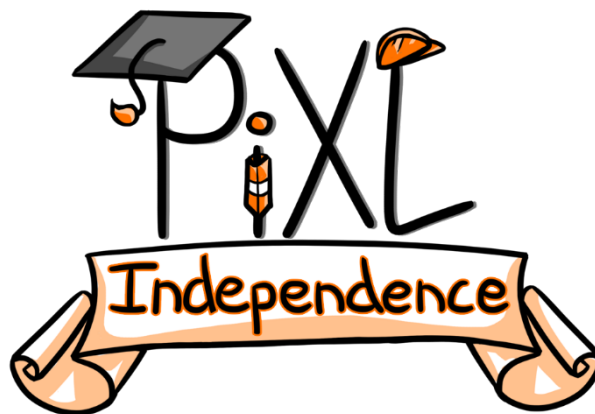
31. Nick has £100,000 in his bank account; he receives interest of 3%. Calculate how much Nick will have in his bank account after one year. (2)
32. David puts £10,000 into his bank account. The bank gives him an introductory rate of 4%. After two years the rate lowers to 2%. Calculate how much interest he would receive in two years. (2)
33. Patrick puts his £50,000 into a variable rate savings account which is linked to the bank rate. In the first year he receives a rate of 0.5%, the second year 0.75%, the third year 1.25% and the fourth year 1.5%. Calculate the balance in his account after four years. (2)
34. Lucy takes out a loan for £50,000 from the bank with an interest rate of 8% and will repay it over ten years.
- a. Calculate the interest she will have to repay. (2)
- b. Calculate the total amount she will have repay. (2)
- c. Calculate the amount she will repay each year. (2)
- d. Calculate her monthly repayments. (2)
35. Will takes out a loan for £7,000 with an interest rate of 4% and a repayment period of three years.
- a. Calculate the interest he will have to repay. (2)
- b. Calculate the total amount he will have repay. (2)
- c. Calculate the amount he will repay each year. (2)
- d. Calculate his monthly repayments. (2)
36. Explain what is meant by investment. (2)

37. Harvey is considering investing in a new hat factory which will require £1m of investment but he will have revenues of £1.1m over two years once it is completed. Harvey is able to get a loan with a rate of 12%.
- a. How much will Harvey have to pay back? (2)
- b. What will his profit on the investment be? (2)
- What if the interest rate fell to 3%?
- d. Is Harvey more or less likely to invest when interest rates are low? Why? (2)
- e. Why might Harvey decide not to invest when interest rates are low? (2)
38. Evaluate how a rise in the bank rate may affect a house builder. (6)
39. Evaluate how a fall in the bank rate may affect consumers. (6)
40. Explain why there are different interest rates for borrowing and saving. (2)
41. Explain why banks offer different rates of interest. (2)
42. Explain why a bank may offer different rates on different savings accounts. (2)
43. Explain what is meant by a deposit account. (2)
44. Explain what is meant by a current account. (2)

Research activity:

Banks offer a variety of different rates depending on the account:

Term/Notice Period	Financial Institution	Rate
Current account		
Instant access account		
30 day period		
90 day period		
120 day period		
1 year		
2 year		
3 year		
5 year		



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