

# EDEXCEL A LEVEL ECONOMICS

# DIAGRAM PRACTICE BOOK



**Student Name:** 

## HOW TO USE THIS BOOKLET

This booklet has been **designed by senior examiners** to help you raise your game with diagrams to maximise exam performance. Gone are the days when you could simply provide a memorised diagram in your exam answers. Diagrams score very few marks unless they are used to contribute to analysis. You need to really understand the diagrams (the lines, the areas) and apply them **dynamically** to the context provided. This means that lines on diagrams need to be shifted in response to the given scenarios, new areas shaded, and revised equilibrium points noted. You may also be asked to **interpret unusual or unexpected areas on diagrams** - examiners do not always ask the obvious 'textbook' questions!

This booklet covers **the entire Edexcel specification** in fine detail, with activities to help you revise and practice every possible diagram based on a comprehensive bank of scenario. Simply read each scenario and question carefully, then draw, adapt or explain each requested diagram. Use this booklet in the crucial final phase of revision at the end of Year 13, or practice your diagrams throughout the entire course - the choice is yours.

## **CONTENTS**

## MICROECONOMICS

PPDS, MARKETS AND THE ALLOCATION OF RESOURCES	Page 3
MARKET FAILURE	Page 15
COSTS OF PRODUCTION AND ECONOMIES OF SCALE	Page 26
REVENUES AND PROFITS & OTHER OBJECTIVES	Page 32
MARKET STRUCTURES	Page 40
THE LABOUR MARKET	Page 48
CONOMICS	
NATIONAL INCOME AND MACROECONOMIC EQUILIBRIUM	Page 52
MACROECONOMIC OBJECTIVES	Page 68
FINANCIAL MARKETS AND MONETARY POLICY	Page 76
FISCAL POLICY AND SUPPLY SIDE POLICIES	Page 82
THE INTERNATIONAL ECONOMY	Page 88
INEQUALITY AND DEVELOPING ECONOMIES	Page 102
	PPDS, MARKETS AND THE ALLOCATION OF RESOURCES  MARKET FAILURE  COSTS OF PRODUCTION AND ECONOMIES OF SCALE  REVENUES AND PROFITS & OTHER OBJECTIVES  MARKET STRUCTURES  THE LABOUR MARKET  CONOMICS  NATIONAL INCOME AND MACROECONOMIC EQUILIBRIUM  MACROECONOMIC OBJECTIVES  FINANCIAL MARKETS AND MONETARY POLICY  FISCAL POLICY AND SUPPLY SIDE POLICIES  THE INTERNATIONAL ECONOMY  INEQUALITY AND DEVELOPING ECONOMIES

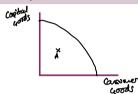
## **MICROECONOMICS**

# SECTION 1 PPFS, MARKETS AND THE ALLOCATION OF RESOURCES

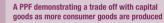
- 1 In the boxes below, draw the appropriate and fully labelled production possibility frontier as requested
- A A PPF showing balanced economic growth

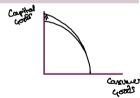
A PPF showing that there are unemployed resources i.e. the allocation of resources is productively inefficient





C A PPF showing an increase in production of capital goods but not consumer goods

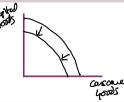






- E A PPF showing an increase in productivity in the capital goods industry, but not the consumer goods industry
- A PPF demonstrating the impact of a natural disaster destroying a proportion of all factors of production

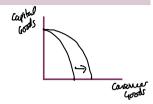




G A PPF showing an obtainable and an unobtainable allocation of resources in an economy

A PPF demonstrating unbalanced growth in an economy





- 2 A student decides to drink successive cans of Coke, one after the other
  - A On the two diagrams below i) in the first diagram, record total utility, and ii) in the second diagram, record marginal utility

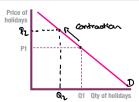


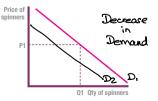


B With reference to your marginal utility diagram, explain the shape of a typical demand curve

- 3 The boxes below will require demand curves to be drawn. Illustrate in the boxes below what happens when:
- A The price of package holidays to Spain rises



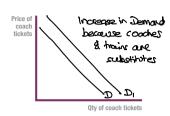




Retailers launch successful Christmas advertising campaigns for gifts

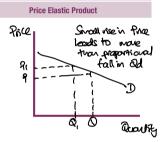


Rail travel between major towns and cities becomes more expensive



4 In each case below, draw an appropriately shaped demand curve and fully label the diagram





Give 3 examples of price inelastic goods or services

- 1 Insulin Imedicine
- <sup>2</sup> Petrol for valider
- Gopwettes

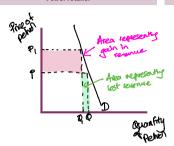
Give 3 examples of price elastic goods or services

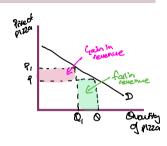
- Growy Swith
- <sup>2</sup> Supermaket own-brand coffee
- Biro pens

- For each of the firms below:
  - i) draw a demand curve
  - ii) indicate what happens when the price rises by 10%, remembering to factor in the likely price elasticity of demand for each product
  - iii) shade in any areas of loss of revenue and any areas of gain in revenue in each case

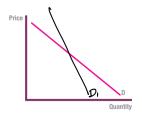
Petrol retailer

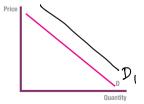
Street pizza retailer



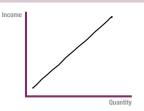


- 6 There are 3 main demand elasticities: price, income and cross. Draw the requested diagram, relating to these elasticities, for each of the scenarios given below
- A Effective advertising for a clothing company leads to demand becoming more price inelastic. Show how the demand curve would change
- B Home-delivery pizza is often regarded as an inferior good. Show the impact on demand for home-delivery pizza when real income falls during recession

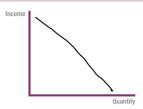




Holidays to Disneyworld in the US have a high, positive income elasticity of demand i.e. they are luxury goods. Show the relationship between income and quantity of holidays demanded on the axes below



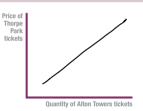
The 2008/2009 recession suggested that lipstick (in the UK) is seen as an inferior good. Show the relationship between income and quantity of lipstick demanded on the axes below



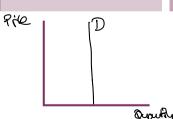
E Apps and smartphones are complementary goods. Represent this relationship on the axes below



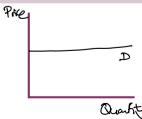
The theme parks Thorpe Park and Alton Towers are substitutes. Represent this relationship on the axes below



G A product such as the essential medicines insulin or epipens, that has perfectly price inelastic demand

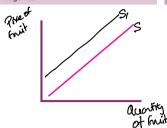


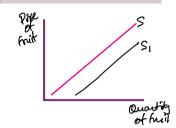
A firm in an extremely competitive market that has no choice but to accept the market price, leading to that firm having perfectly price elastic demand



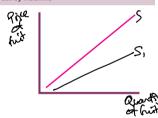


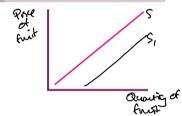
- A The labour used in production receives a wage rise
- B A bumper harvest is achieved after sunny weather



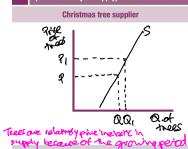


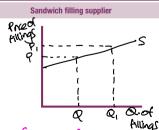
- C Technology improves so that fruit pickers are no longer needed as their jobs can be carried out by machine
- D The government subsidises fruit growing firms in a drive for improved healthy eating in the UK



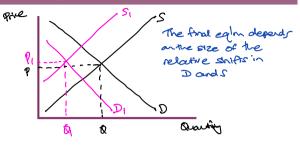


8 Both of the producers in the example below have seen the market price of their output rise by 20% this year. Draw and fully label appropriate supply curve diagrams (thinking about the concept of price elasticity of supply) to demonstrate what would happen in each case





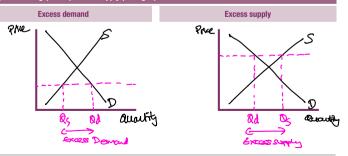
Sandurdh fillings are retarily price closes in supply due to A product is sold at the equilibrium price in a market. However, due to poor publicity about the quality of the product once it is in use, and a rise in the price of the raw materials used, the equilibrium has changed. Demonstrate these changes on the diagram below. Remember to label the axes and curves accurately



EXPLAIN what has happened here, ensuring that you refer to the price mechanism and the functions of prices

Demand has fallen due to poor publicity and supply has fallen due to the increase in production costs. The initial fall in demand leads to excess supply at the original market price so there is downwards pressure on price. However the decrease in supply clears that excess supply so overall there is little change in the market price.

Markets are sometimes not in equilibrium. Draw diagrams to indicate i) excess demand (i.e. a shortage) and ii) excess supply (i.e. a glut)



Give 2 reasons / scenarios in which there may be excess demand in a market

- 1 Gou't imposes a max. price
- 2 Demand increases to it total three for the market to adjust

Explain how the market mechanism operates in order to clear the excess demand

Excess demand implies there is a shortage and it signals to producers that they need to increase the quantity supplied and increase price. As the price rises this rations the good to those willing and able to pay, until a new ed'm is reached.

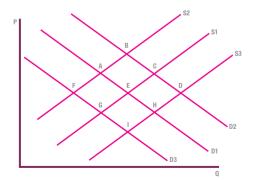
Give 2 reasons / scenarios in which there may be excess supply in a market

- 1 Goult imposes a minim price
- 2 Demand feels a it takes time for the wavet to adjust

Explain how the market mechanism operates to clear the excess supply

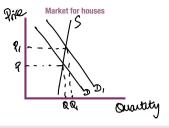
Excess supply implies there is a glut; it signals to producers that they need to reduce the quantity supplied and reduce price. As the price falls this means that more consumers are able to buy the good. This continues until a new eg'm is reached.

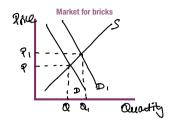
- The diagram below illustrates the market for fast food, with initial Demand and Supply at D1S1 and an initial equilibrium at point E.
  - $\overline{\phantom{a}}$  A rise in the price of meat, an essential ingredient for fast-food burgers A
  - b A health conscious movement in the general public. &
  - c A 'fat tax' is imposed and a 'healthy eating' campaign launched. F
  - d A new form of cooking oil is developed to aid fast cooking of chips  $\,\mathcal{H}\,$
  - e More people now commute for longer periods, and more people are accepting temporary jobs in fast food restaurants as they are 'in between' work  $\, \, \mathfrak{D} \,$
  - f The minimum wage rises and more low-income individuals eat out with their children  ${\mathfrak F}$



Using appropriate diagrams, demonstrate the nature of the interrelationship between these markets

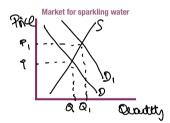
The market for bricks when the demand for housing rises. Relationship = Derived Demond



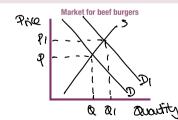


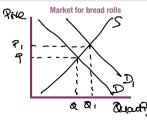
The market for sparkling water after the sugar tax was imposed. Relationship = Substitutes





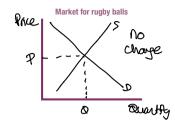
The market for bread rolls during a hot sunny summer when the market for beef burgers experiences a rise in demand. Relationship = Compensed





The market for rugby balls following an increase in demand for gloss paint for exterior windows. Relationship = Unrelated



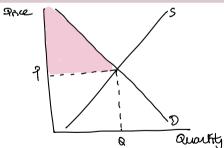


Consumer surplus and producer surplus are measures of welfare for each of these economic agents

**Define consumer surplus** 

The difference between the market price and the maximum price that a consumer is willing to pay.

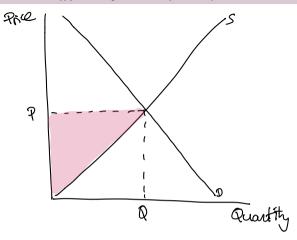
Draw a demand and supply market diagram to illustrate consumer surplus



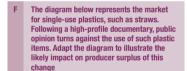
Define producer surplus

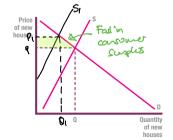
The difference between the market price and the minimum price that producers are willing to accept.

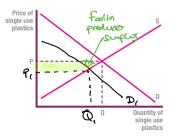
Draw a demand and supply market diagram to illustrate producer surplus



The diagram below represents the market for new housing in the UK. Suppose that the government reduces planning restrictions on land. Adapt the diagram to illustrate the likely impact on consumer surplus of this change

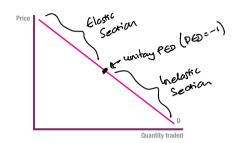




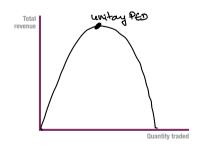


#### The price elasticity of demand varies along a downwards-sloping straight-line demand curve

On the diagram below, label i) the price inelastic section, ii) the price elastic section and iii) the point at which demand has unitary price elasticity



- State what happens to total revenue earned by a business when the good sold is price elastic in demand, and the price is decreased TR nses
- State what happens to total revenue earned by a business when the good sold is price inelastic in demand, and the price is decreased TR falls
- State what happens to total revenue earned by a business when the good sold is has unitary price elasticity, and the price is decreased TR is undrawed
- For the demand curve shown above, sketch the corresponding total revenue curve on the axes below



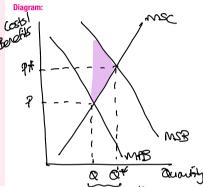
## **SECTION 2** MARKET FAILURE

- In each of the spaces in the table below:
  - a give AT LEAST 4 examples of each externality in the left-hand column
  - b in the right-hand column draw an MSC/MSB diagram showing the free market output and price, and the effect of the externality, marking the socially optimum output
  - c indicate on your diagram whether the externality leads to over-production, under-production. over-consumption or under-consumption
  - d shade the area representing the welfare loss on each diagram

## Positive Externalities in Consumption

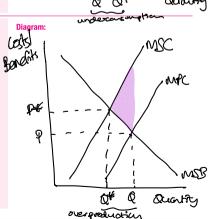
- 1 Vaccinations

- 2 Fusher Education
  3 Vegetables
  4 Cardening Equipment



## **Negative Externalities in Production**

- 1 Steel production

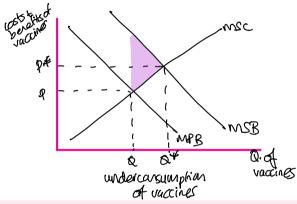


The MMR vaccine protects children from Measles, Mumps and Rubella - three diseases which are potentially very damaging, even deadly. It is given free-of-charge on the NHS as a single injection to babies, usually within a month of their first birthday. They then have a second injection before starting school, when three years old.

The MMR vaccine has dramatically reduced cases of measles, mumps and rubella and saved about 4,000 deaths from measles, resulting in the UK being declared "measles free" by the World Health Organization last year. However, the number of children receiving the vaccine is falling; in England, it has fallen from over 95% to 87% of children, and in the first nine months of 2018, there have been nearly 1,000 cases of measles.

to ignore "fake news", and to get their children vaccinated

Using the axes below, draw a diagram to show the impact of the information gap (i.e. market failure) in the market for the MMR vaccine in the UK

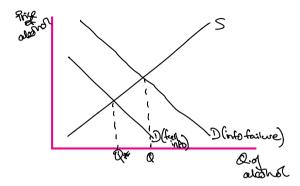


#### Write an explanation of what is happening in this marke

Vaccines generate significant private benefits for those who are vaccinated. They also generate external benefits because people who are not vaccinated are able to benefit due to reduced disease transmission, in this case, measles, mumps and rubella. The data suggests that there is significant under consumption of the vaccine at the moment as it has fallen to just 87% of babies. There's for babies who have not had the vaccine are more likely to suffer from MMR as a result

Alcohol Concern is a pressure group that attempts to raise awareness about alcohol misuse. In 2015 there were 8758 alcohol related deaths, and alcohol misuse is the biggest risk factor for death. ill-health and disability among 15-49 year olds in the UK, and the fifth biggest risk factor across all ages. Alcohol harms are estimated to cost the NHS around the £3.5 billion annually

Using the axes below, draw a diagram to show the impact of the information gap (i.e. market failure) in the alcohol consumption market in the UK

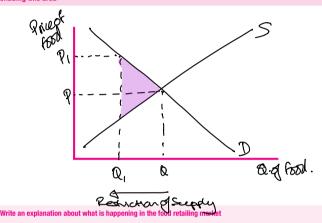


Write an explanation about what is happening in the alcohol consumption market

Because of the addictive nature of alcohol, and the fact that the effects of its consumption can be a long way in the future, there is information failure. This means that demand is higher than it would be with full information, and so there is over consumption of alcohol.

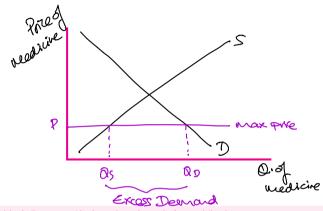
EXTENSION TASK: The proposed merger between Sainsbury and Asda has caused some concern in the food retailing market. This would be a merger between the UK's second and third largest supermarkets and would lead to 463 areas in the UK where it is believed there is a 'realistic prospect of a substantial lessening of competition' (the Competition and Markets Authority (CMA)). If this is the case, shoppers could face higher prices or a worse quality of service

Using the axes below, draw a demand and supply diagram to show this potential market failure in the food retailing market in the UK. Indicate any loss of consumer surplus that might occur on your diagram by shading this area



Competition in the food retailing market is decreasing due to merger activity, and would decrease further is Sainsbury's and Asda merged. This would lead to a lessening of supply and restriction of output, leading to higher prices because of the increased market power of the supermarket companies.

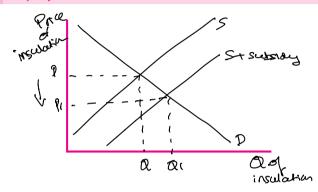
- In the UK, there is a maximum price for the NHS prescription charge of £8.80 for each medicine prescribed
- Using the axes below, show what effect a maximum price in this market has on the equilibrium price and quantity of medicine



Explain why the government has imposed a maximum price for prescription charges

A maximum price is set below the free market eg'm, usually in order to improve access to essential goods or services for those on low income. This is with the intention of improving living standards. In the case of medicine, the gov't wants everyone regardless of income to be able to buy medicine - many medicines would cost a lot more than £8.80in a free market. There are positive externalities associated with the use of medicine- people are less likely to transmit diseases and more likely to be able to work productively.

- The Government in the UK leads an Energy Company Obligation Scheme (ECO) which helps families on low incomes and in receipt of government benefits to reduce their energy bills. The big energy companies, such as British Gas, EDT, EON, Npower and Scottish Power, are required by the government to help such families save money on their heating. One way in which consumers can reduce spending on energy bills is to use better insulation, and government can help by offering subsidies to building firms to reduce the price of insulating materials
- A Using the axes below, draw a diagram representing the UK home insulation market
- B Apply a government financial subsidy to the equilibrium, and explain what happens to the price and quantity

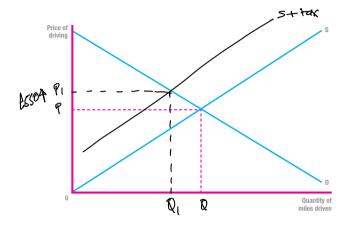


C Explain how this government intervention is an attempt to correct the market failure caused by under-consumption of house insulation by low income families

Home insulation will lead to positive benefits, such as healthier households who are more productive at work, and children who are more able to concentrate and attend school. It may also reduce hospital admissions for people suffering with cold-related illnesses. This has positive impacts on third parties.

A subsidy is a grant given by the government to producers, to lower production costs and therefore increase supply and lower the market price of insulation. This in turn increases the quantity of home insulation demanded, reducing the under consumption and helping to tackle the market failure.

Cars in the UK have a tax applied to them (Vehicle Excise Duty, VED). Fred owns an old diesel car that is heavily polluting, creating emissions over 255g/km (the most polluting possible). His VED for 2018/19 is £555 for the year. Using the demand and supply diagram below, annotate the diagram fully and show the effect on the initial equilibrium of the VED tax imposed. Explain what is happening in the space that follows the diagram



#### **Explanation**

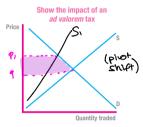
Pollution from old diesel cars leads to negative externalities. The tax (VED) is intended to equal the estimated external costs, thus internalising the externality. In the case of Fred this would be  $\mathfrak{L}555$  per year. This causes a contraction along the demand curve reducing the number of miles driven, hopefully to the socially optimal level.

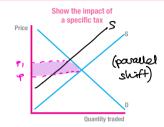
8 A Distinguish between an ad valorem tax and a specific (unit) tax, ensuring that you give at least one example of each type of indirect tax

Advalorem: a lo tax (lo of the marciterice)
e-g. UAT

Specific: a set tax per unit sord e-g. sugartar

B Adapt the diagrams below, as requested



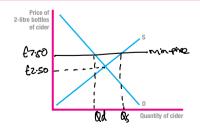


Now indicate the change in consumer surplus and producer surplus on the above diagram

Now indicate the change in consumer surplus and producer surplus on the above diagram

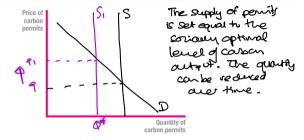
9 In May 2018, the Scottish government implemented a new law which set a minimum price on alcohol of 50p per unit. Scottish government ministers said that the minimum price was intended to tackle 'problem drinkers', who typically drink very cheap alcohol. Prior to the introduction of the minimum price, a 2-litre bottle of strong cider (containing 14 units of alcohol) could be bought for just £2.50. The same bottle will now cost consumers £7.50

Show the impact of the new minimum price on the market for 2-litre bottles of cider, by adapting the diagram below

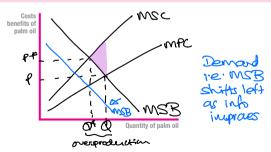


The EU's Emissions Trading Scheme (EU-ETS) is described by the EU as a "cornerstone of the EU's policy to combat climate change and its key tool for reducing greenhouse gases cost-effectively, It is the world's first major carbon market and remains the biggest one". The market was established in 2005 and operates as a 'cap-and-trade' system. In 2020, carbon emissions will be 21% lower than they were in 2005, and by 2030 they will be 43% lower than in 2005

Using the diagram below, illustrate and explain the mechanism by which reducing the carbon emissions 'cap' and allowing carbon-producing firms to 'trade' their permits reduces market failure



- In November 2018, the food store Iceland said that an advert it had produced, outlining the devastating impact of collecting palm oil on the habitat of orangutans, had been banned by the UK's Advertising Standards Authority for being 'too political'. However, the advert was widely shared on social media and 'went viral', prompting consumers to become much more aware of the impact of palm oil collection. Palm oil is used in many cosmetic products, such as shampoo
- A Using the axes below, draw a diagram to illustrate the negative externalities caused by the production and collection of palm oil

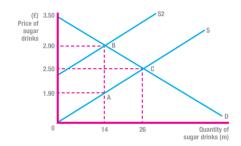


B Adapt your diagram above to show the impact of improved information. Ensure that you show the new equilibrium point, as well as any changes to welfare loss

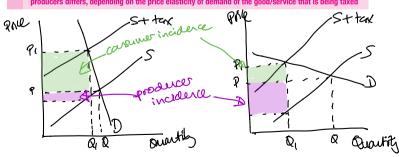
## 12 The tax on sugary drinks was imposed in 2018 in the UK. Using the information provided on the diagram below, calculate

- the consumer surglus before the tax

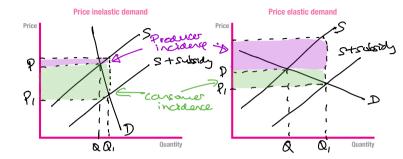
  (3.50-2.50) \*76m EBm
- the producer surplus after the tax  $(2.90 2.40) \times 14 = £35m$ 2
- the total producer surplus before the tax  $\frac{2.80 \times 76m}{7} = £32.5m$
- the government revenue earned by the tax (2.90-1.90) x14m = £14m
- the consumer surplus after the tax  $(3.50-2.90)\times14m = £4.2m$



## In the space below, sketch diagrams to show how the incidence of tax between consumers and producers differs, depending on the price elasticity of demand of the good/service that is being taxed



- 13 This question relates to analysing the impact of a subsidy on both consumers and producers
- A Complete the diagrams below, to show demand (with the elasticity as requested) and supply, along with the relevant equilibrium point in each case

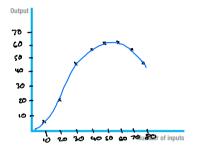


- B On each diagram, show the impact on price and quantity if the government introduces a subsidy
- C On each diagram, indicate the area that represents the consumer subsidy www
- On each diagram, indicate the area that represents the producer subsidy
- E Outline the relationship between PED and the incidence of a subsidy

When PED is relatively price inelastic, the impact is mostly on the consumer in terms of a significant fall in price. Then producer incidence is minimal. However, when PED is relatively elastic the fall in price is much smaller and so the consumer incidence is much lower than the producer incidence.

# SECTION 3 COSTS OF PRODUCTION AND ECONOMIES OF SCALE

1 Using the information provided, plot output against input for Firm Y as it increases its number of inputs, labelling your curve appropriately. In the space below, write an explanation of what is happening in your diagram



Inputs	Outputs
10	5
20	20
30	45
40	55
50	60
60	60
70	55
80	45

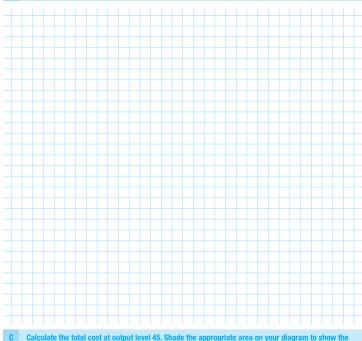
Explanation (ensure that you use the terms marginal product, average product and total product in your explanation)

Initially, total product rises very quickly- each new input is highly productive (because, for example, division of labour) and so output rises more quickly than input. Marginal output (represented by the slope of the total product curve) rises very quickly - we can this increasing marginal returns. However, capital becomes increasingly scarce as we add more labour, and so the marginal product of additional factors of production starts to fall I.e. diminishing marginal returns. Eventually, the addition of inputs starts to significantly slow down the production process and total product starts to fall I.e. marginal product becomes negative.

2 A Complete the table below which shows cost data in the short term for Widgets Ltd

Output	TFC	TVC	TC
10	25	20	45
20	25	40	65
30	25	60	85
40	25	80	105
50	25	16D	125
60	25	120	145

(Assume VC ises proparturately with output)



Using the data, plot the fixed cost, variable cost and total cost incurred when producing widgets

Calculate the total cost at output level 45. Shade the appropriate area on your diagram to show the proportion of total cost that is fixed and the proportion made up of variable costs

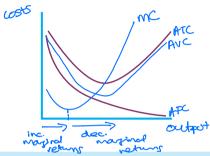
3 On the diagram below:

i) label the axes

ii) label the ATC and AFC curves

iii) draw an appropriate average variable cost curve

iv) draw the associated marginal cost curve



## v) Explain the reason for the shape of the marginal cost curve

The shape of the MC curve is determined by the law of diminishing marginal returns. In the short run, some factors of production are fixed e.g. capital, so output rises as a result of variable factors being added to the production process e.g. labour. To a point, this increases output more quickly than the increase in inputs - the marginal product rises and so marginal cost falls (increasing marginal returns). However, capital quickly becomes more scarce and so labour becomes increasingly less productive than the previous worker - marginal product falls and so marginal cost rises.

vi) Indicate the range of output over which there are increasing marginal returns

vii) Indicate the range of output over which there are diminishing marginal returns

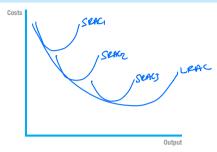
4 A Explain what is meant by the 'short-run' in economics

At least one factor of production is fixed.

B Explain what is meant by the 'long-run' in economics

All factors of production because variable.

On the axes below, draw a series of short-run average cost curves, and their associated long-run average cost curve (often known as the 'envelope curve')



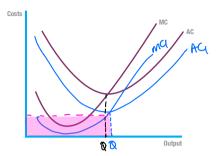
## D Explain your diagram

The series of short run AC curves reflects an addition to capital I.e. a series of short runs. These combine into the long run.

- 5 Sunny Tomato Sauces Ltd enjoyed the very long hot summer of 2018; their supplier of tomatoes reduced their price as a result of a bumper crop
- A Adapt the diagram that follows to show the change in costs MC+ACshift down
- B If Sunny Tomato Sauces chooses to operate at the level of output where average cost is minimised, what is the change in their average cost per unit as a result of the sunny weather?

AC will fall. The cost of tomatoes is a variable cost so born Ac and MC shift danward

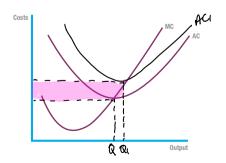
Shade the area showing new total cost



- As the cost of collecting rubbish from the streets rises, the Town Council in Dilton has decided to raise the rent chargeable on the shops located in Main Street
- Define the terms 'fixed cost' and 'variable cost'

+: (xed cost: does not vary proparticately continue level of output i.e. must be found even when outputish lainable: vailes dischy with the level of output

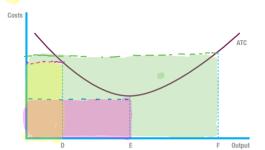
- Adapt the cost curves for hairdresser 'Crowning Glory' appropriately to reflect this change
- Shade the change in total cost if Crowning Glory attempts to minimise its average cost at all times



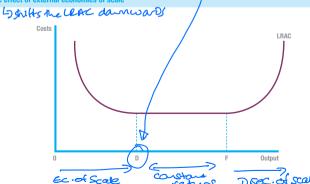
- On this short run average cost diagram below, and using different colours / hatchings / shading,
  - output is D B output is E



C output is F



- On the diagram below, indicate:
- the range of outputs over which economies of scale are experienced
- the range of outputs over which diseconomies of scale are experienced
- the range of outputs over which constant returns to scale are experienced
- the smallest amount of output that can be made whilst being productively efficient
- the effect of external economies of scale



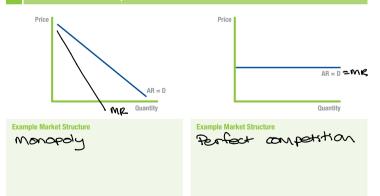
Using the diagram below, explain what is happening for this firm, and give two examples of industries that may experience a long run average cost curve of this shape



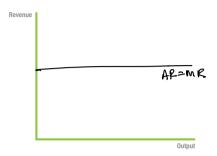
Constantly feeling thin the LR (network managery) due to very high fixed sunt costs

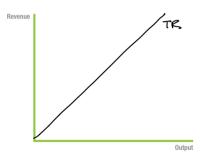
Post service

## SECTION 4 REVENUES AND PROFITS & OTHER OBJECTIVES



- On the top set of axes, draw the average revenue and marginal revenue curves for a price-taking firm
- On the bottom set of axes, draw the associated total revenue curve for a price-taking firm

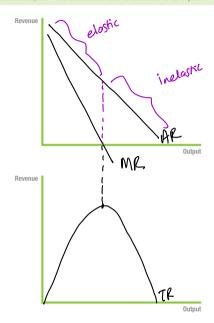




Explain the relationship between the revenue curves shown above

Price is constant for a price-taker therefore AR=MR. The will rise at a constant rate.

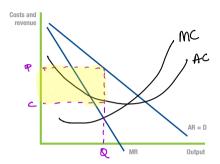
- On the top set of axes, draw the average revenue and marginal revenue curves for a price-making firm
- On the bottom set of axes, draw the associated total revenue curve for a price-making firm

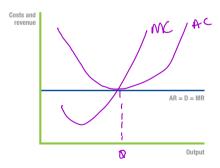


Explain the relationship between the revenue curves above

hitally, derivand is price elasticity of demand in your explanation hitally, derivand is price elastic - one the price fails, the Od ises more than proportionatedy so TR rises. ML is less than AR, because to sell an additional writing price of all previous outs also need to be reduced. However, in the elast c section, ML is still portive. If unitary PED, MR 20 1.E.TR elastic section, many Begand this point, PED is inclusive so a continued reduction in pive occuses TR to four ie une is negative

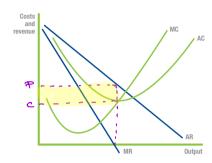
- Complete the diagram below for a price-making firm (such as in monopoly or oligopoly) that is earning supernormal profits
  - Write down the profit maximising condition MC=MR
  - Shade the area representing the abnormal profit



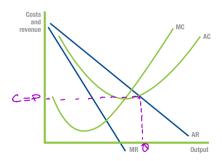


#### Not all firms are profit maximisers

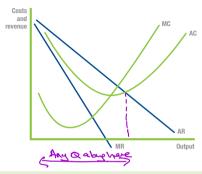
A On the diagram below, indicate the output and price (and any resulting loss or supernormal profit) made by a revenue-maximising firm. Write the revenue-maximising condition here M2=0



B On the diagram below, indicate the output and price (and any resulting loss or supernormal profit) made by a firm that aims to maximise sales (i.e. operating at an output level where just normal profit is earned). Write the sales-maximising condition here



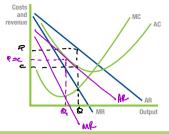
On the diagram below, indicate the range of output and price (and any resulting loss or supernormal profit) over which a firm is 'satisficing'



D For each of the following objectives, try to give two examples of firms that might follow that objective

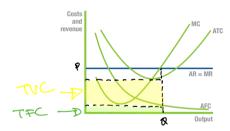
	Example 1	Example 2
Revenue Maximising		
	Students Exam	ow
Profit Maximising	Lecun	rpies.
Sales Maximising		
Satisficing		

7 The diagram below represents a price-making profit-maximising firm. Adapt the diagram to illustrate the impact on i) price ii) output and iii) profit if the firm experiences a fall in demand



Inthic case i) space falls ii) august fall iii) protit fall

- 8 A hot chocolate vendor at a Christmas market faces significant competition from other hot chocolate vendors. The diagram below represents her profit-maximising business
  - Shade the area that corresponds to her total variable cost
  - i) In a different colour, shade the area that corresponds to her total fixed costs



iii) The cost of renting her hot drinks cart from the manufacturer increases 20%. Draw your own diagram in the space below to show the impact of this change on i) price ii) output and iii) profit

Diagram should show:

Don'increase'n fixedoots re upwards

shift'in ATC and AFC, but no drage

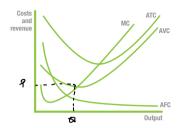
in MC

Dono drage'n price autout, but a feell in profit

9 A Write down the condition under which firms will shut down in the short-run

IF PARE < TUC

B Adapt the diagram below to show the short-run shut down point for a price-taking firm



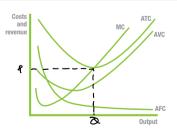
C Write down the condition under which firms will shut down in the long-run

if pive (TC

D Explain why this is a DIFFERENT condition to that in the short-run

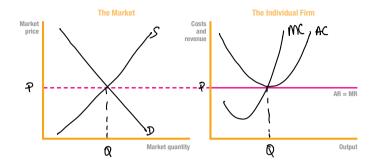
In the LR fines need to be about to cover and of their costs to be about to survive. In the SR, there was to be about to cover their various costs + contribute towards their fixed costs

E Adapt the diagram below to show the long-run shut down point for a price-taking firm

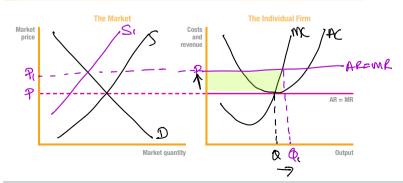


## **SECTION 5 MARKET STRUCTURES**

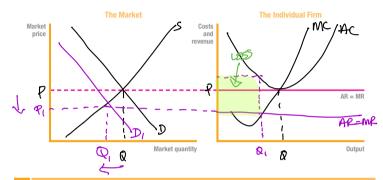
1 In the double diagram below, show the long run equilibrium position for a perfectly competitive firm that has the objective of profit maximising. The diagram has been started for you



- 2 Using the double diagram below
- A first show a perfectly competitive market, and an individual firm in that market, both in long-run equilibrium, as in question 1 above
- B demonstrate what happens to the individual firm's position when a significant number of firms leave the market
- C shade any areas of loss or supernormal profit



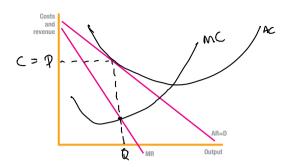
- 3 Using the double diagram below
- A first show a perfectly competitive market, and an individual firm in that market, both in long-run equilibrium, as in questions 1 and 2 on the previous page
- B demonstrate what happens to the individual firm's position when demand for the output falls in the market
- C shade any areas of loss or supernormal profit



- 4 Walk & Go is a dog-walking service located in Warminster which aims to maximise its profits. Within a 15mile radius there are 6 other similar dog-walking services, each offering slightly differen lengths of walks, giving the owners plenty of choice
- A Briefly outline why Walk & Go most likely operates in a monopolistically competitive market

Many firms - slightly differentiated goods berices, few entry bouriers, no dominant firms

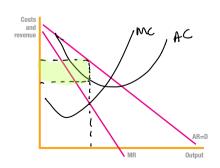
B Adapt the diagram below to show the long run equilibrium position for Walk and Go



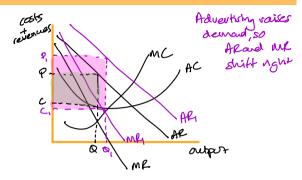
- C Walk & Go's owner, James, has bought a new van which is more fuel efficient to use when driving the dogs to their walks
- Using the diagram below, explain what happens to Walk & Go's equilibrium position as a result of the van purchase

Variable asts will fall, therefore AC and MC shift downwards

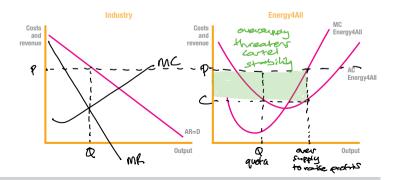
il) Indicate any areas of supernormal profit or losses made as a result of the changes to fuel efficiency

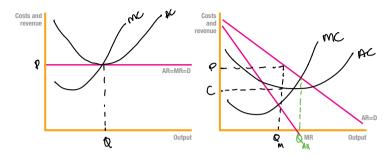


Tesco Supermarkets have recently announced a rise in profits due to a successful campaign to wi back customers from discount supermarkets such as Aldi and Lidl. Draw an appropriate diagram below to show how Tesco has achieved rising profits. Makes sure that you label the axes, curves, and both the old and new areas of profit

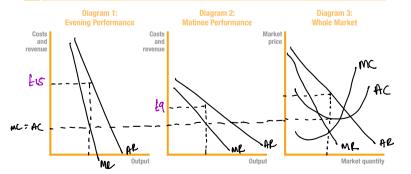


- 6 EXTENSION QUESTION: Energy4All electricity supplier is suspected of colluding with the other five major energy suppliers in the UK. If this was true, Energy4All will have been given a quota to limit the output of electricity it produces for the market. Using the diagram below, illustrate:
- A how the cartel will operate to set a price and limit output by each cartel member
- B why Energy4All may have an incentive to cheat on the guota, and
- C indicate the gains achievable by Energy4All if it does supply more than its collusive quota



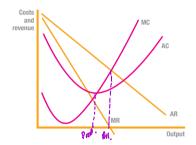


Allocative efficiency occurs when P=AR=MC. This will obscuring extracting sections are competitive time that profit working so. In a managery firm, though, the profit work autical furner wice will be below the level of output cut which the error in GREED on the right-band diagram)



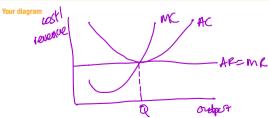
Demand for the evening performance will be move price inclosed than the matine performance (people attending in an evening have less flexibility a timings). The MC is constact for born performances. This leads to higher prices in the evening than afternoon.

- The diagram below shows a price-making firm. Indicate:
- i) the productively efficient level of output lavest AC
- ii) the allocatively efficient level of output MC = AP



- Now draw your own diagram to show a perfectly-competitive firm in the long-run. Again, indicate:
- i) the productively efficient level of output
- ii) the allocatively efficient level of output

Q



Explain what is meant by a firm that has a 'natural mono

Fixed sunk costs are so high that AC feels continuously. There is any 'space' for I firm to appearte with any degree of production efficiery in this Industry.

Explain why it is difficult for natural monopoly firms to earn supernormal profit

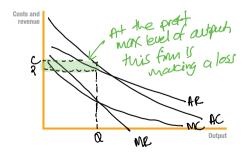
by had for AC to be lower than AR, due to the scale required for AC to stop to focu.

Explain why natural monopoly firms may often be operated by the government in the 'national interest', and allowed to operate at the allocatively efficient level of output

The profit wax point (MC=MK) way be at a relatively les level of output cat which ec. of scale house not been fully exploited - this may cause either Wern prices or sub-named profits. A port nay appeare at the allocatively efficient point to reduce Priest wider

D Draw a diagram on the axes below to illustrate a natural monopoly firm

acces



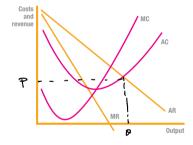
Explain what is meant by a contestable market

A manest in which barriers to entry are so law that the threat of posential competition is very ligh, coursing incumbent firms to behave more consetitively

Outline what is meant by 'limit pricing', in relation to firms operating in a contestable market

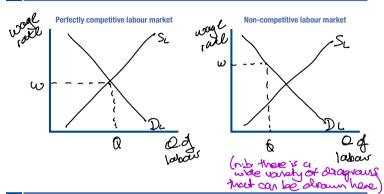
The use of pricing as a bourser to entry; incumbent firms choose to produce at normal prohit (AR=AC) so as to avoid earning supernounal profit + affrocting were environted that force is the price at which normal profit is carred.

Indicate the limit price and associated level of output on the diagram below

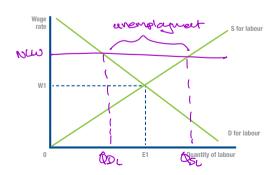


## **SECTION 6** THE LABOUR MARKET

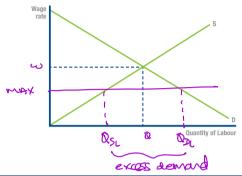
In the two diagrams below, show how the equilibrium wage rate is established in a perfectly competitive labour market (left hand box) and in a non-competitive labour market (right hand box)



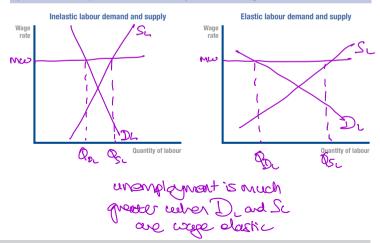
The National Minimum Wage (NMW) is the lowest wage that employers are allowed to pay to their workers; it is set as an hourly rate and is set by the Chancellor of the Exchequer in his annual Budget speech. The Real Living Wage, calculated by the Living Wage Foundation, is the minimum hourly payment needed by a full-time worker to have a decent standard of living. The government has a target to use this Real Living Wage as the NMW per hour for workers aged 25 and over. Demonstrate the effect of the Real Living Wage on the diagram below. Show the effect the Real Living Wage may have on employment



There has been significant debate in the UK following the Financial Crisis and Great Recession regarding the likely impact of imposing a maximum wage on the earnings of executive board members of large organisations such as banks. Illustrate the effect of imposing a maximum wage for executive pay using the diagram below



- The impact of minimum wages on unemployment levels depends on the wage elasticity of labour demand and supply
- i) On the axes below, demonstrate the different impact of minimum wages in each case:



ii) Give an example of a labour market with relatively wage-inelastic labour demand and supply.

Justify your answer

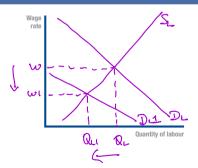
newlosurgeons

iii) Give an example of a labour market with relatively wage-elastic labour demand and supply.

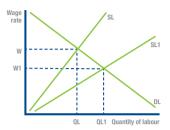
Justify your answer

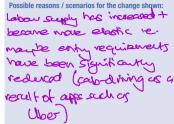
supermarket shelf stackers

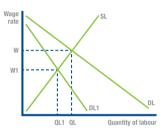
6 Companies such as Amazon increasingly use technology and robots in their packaging and distribution warehouses. This is reducing the need for low-skilled labour in these industries. Illustrate the impact of this on the labour market diagram below. (Remember to consider the impact on elasticity of labour demand/supply as well as possible shifts in labour demand/supply)



## For each of the diagrams below, suggest possible reasons for the changes shown:







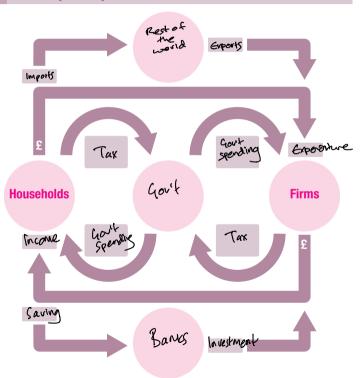
Possible reasons / scenarios for the change shown:

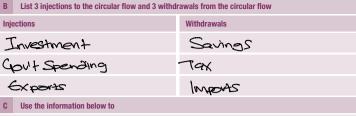
Demand for below has
foother + became more
unge inelection

## **MACROECONOMICS**

## SECTION 1 NATIONAL INCOME AND MACROECONOMIC EQUILIBRIUM

- 1 The Circular Flow of Income
- A Label this diagram showing the Circular Flow of Income





i) calculate the balance of injections and withdrawals

Injections = 85 + 250 + 73 = fuotion

Carrier will

Contract and \$5 + 250 + 50 = f3565n

in charge

ii) state whether the Circular Flow will expand or contract:

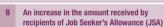
#### Data:

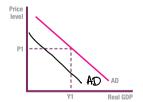
- Imports £56bn
- Exports £85bn
- Total taxation £250bn
- Savings £50bn
- · Government spending £250bn
- Business Investment £73bn

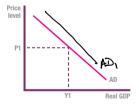
## 2 Aggregate Demand

For each of the scenarios given below, add to/adapt the diagram to show the likely impact on the UK's aggregate demand curve

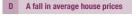
A An increase in the rate of income tax

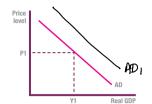


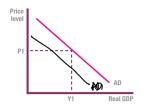




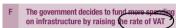
C An increase in business confidence

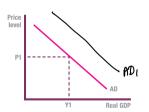






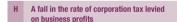
E An increase in the real GDP per capita in the EU and the US

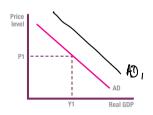


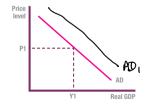




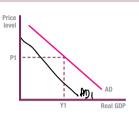
G A weakening of the UK Pound on the foreign exchange markets



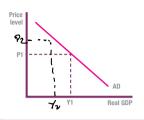




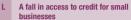
I A rise in the household savings ratio, as workers feel less confident about future job prospects

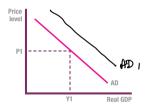


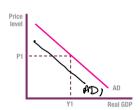
J An increase in the general price level in the economy



An improvement in the quality of UK exports, resulting in an improvement in net exports



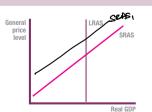




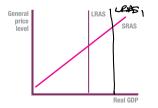
3 Aggregate Supply – the Neoclassical perspective

For each of the scenarios given below, add to/adapt the diagram to show the likely impact on the UK's short-run aggregate supply or long-run aggregate supply curve

A An increase in the rate of VAT to 22%

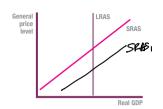


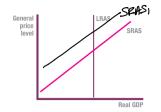
An improvement in the technology used by UK firms



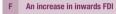
## C A significant fall in the price of oil

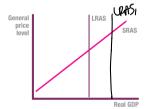
D A weakening of the UK Pound on the foreign exchange markets

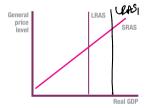




E An announcement in the government's Annual Budget stating that there will be a large increase in the spending on apprenticeships

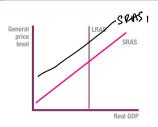


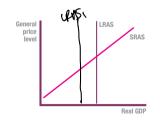




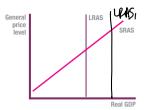
G An increase in the National Living Wage Rate

Negative net migration of skilled labour

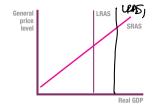




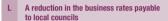
I An improvement in the productivity of the UK's workforce

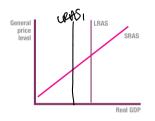


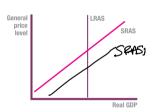
J Greater government support for new businesses, such as reduction in red-tape involved in setting up a business, and lower corporation tax rates for new start-ups



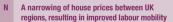
K Reduction in the ready availability of business credit from the UK's banking sector, following profit warnings from many retailers

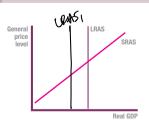






M Widespread flooding in winters and increased drought in summers, due to climate change



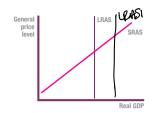




An ageing population, causing a shrinking in the population of working age

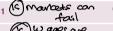
Introduction of more free-market policies including increased privatisation and further deregulation



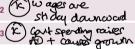


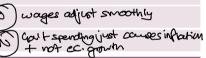
## Keynesian versus Neoclassical perspectives

Outline 3 key differences between Keynesian and Neoclassical perspectives on the macroeconomy



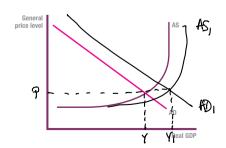
markets always dear



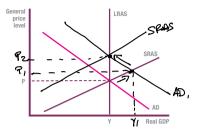


Keynesian AS curves

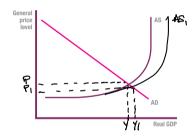
Using a Keynesian AD/AS diagram, show how rising government spending on infrastructure will affect the price level and amount of real GDP produced



#### Now represent the same scenario on a Neoclassical AD/AS diagram

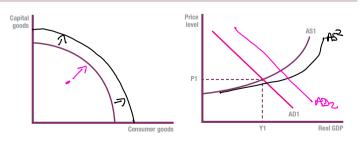


#### Using a Keynesian AD/AS diagram, show how net migration might affect the price level and amount of real GDP produced



## PPFs and aggregate supply

Here are two diagrams, showing the PPF and the Aggregate Supply for an economy

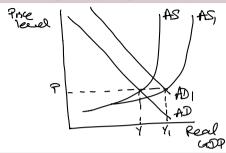


On both diagrams, show an increase in potential long-run GDP growth w black A simultaneous increase in the rate of VAT and a reduction in government spending on defence On both diagrams, show increase in actual short-run GDP growth New equilibrium point: Suppose that the PPF and LRAS have shifted out due to a change in net migration. Explain the nature of that change (i.e. emigration, immigration etc) Widespread investment in R&D brings new technology into use for the economy Pastille net immigration New equilibrium point:  $\in$ An increase in the basic rate of income tax, and a fall in the oil price New equilibrium point: Macroeconomic equilibrium The Multiplier In this Keynesian AD/AS diagram, the initial macroeconomic equilibrium is at point 'X'. For each of the changes to the economy described below the diagram, select the new equilibrium point. N.b. Each time, Explain what is meant by the multiplier process: you should start from the original equilibrium point X An injection into the economy leads to a more than grapationate increase in national incove Give the multiplier formula: mpw = 1 - 1 mpw = (1-mpc) = mps+mpt+mpm ДПЗ Outline factors that would cause the multiplier in an economy to be high Law interest rates, high confidence, protectarist measures

A reduction in business rates New equilibrium point: A reduction in the value of imports New equilibrium point: A fall in the level of consumer confidence New equilibrium point:

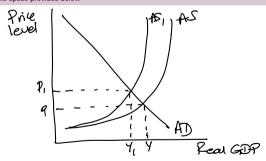
Real GDE

Draw a Keynesian AD/AS diagram to show the effect of an increase in government spending on infrastructure projects such as improved public transport in the North-East of England. Write a short explanation of the changes shown in your diagram in the space provided below



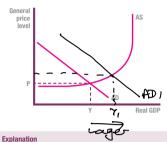
Explanation . AD increases because G is a component of AD . Impraed infrastructure increases productive potential therefore As riles too

Draw a Keynesian AD/AS diagram to show the effect of decrease of inward foreign direct investment in the UK due to concerns about Brexit deal. Write a short explanation of the changes on your diagram in the space provided below

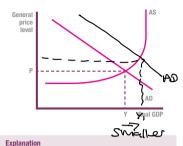


Explanation Less mooned to 1 reduces UK capital re. UK production parental

On this AD/AS diagram, show and explain why an increase in AD will lead to a large multiplier effect



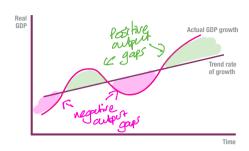
High space coepacity likely to be stranger of there are many evailable for pls On this AD/AS diagram, show and explain why an increase in AD will lead to a small multiplier effect



minimal spare capacity reduces the multiples as autport cannot ise easily

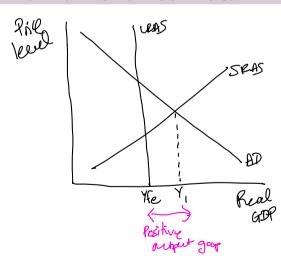
## The Economic Cycle and Output Gaps

On this diagram of the Economic Cycle, label positive and negative output gaps

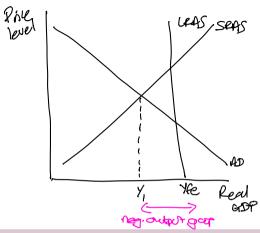


Draw the following diagrams relating to output gaps.

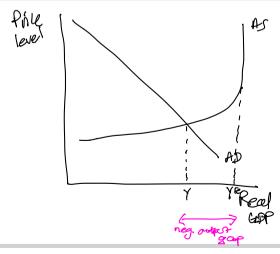
A Neoclassical (monetarist) AD/AS diagram representing a positive output gap:



## A Neoclassical (monetarist) AD/AS diagram representing a negative output gap



## A Keynesian AD/AS diagram representing a negative output gap



What is the difference between a 'slump' and a 'recession'?

Recession: 2 consecutive quarters of regative economic growth

Slump: mare serious + prolonged i.e. a deeper fall in GDP (at legst 10%)

What is the difference between a 'recovery' and a 'boom'?

fectivery: nsing GPP ie. positive growth vate although probably still below then growth rates. A boom suggests growth is above the trend growth rate

Label each of these events A to G on the Economic Cycle diagram below, at the stage that they are most likely to occur:

- A Builders decide to delay the construction of new homes
- B Reports that the number of job vacancies is rising
- C Home delivered pizza becomes more popular
- D The Office for National Statistics announces a fall in size of the trade deficit due to a reduction in imports
- E Rising business class air revenues boost profits of leading airlines
- F McDonald's holds prices despite a rise in ingredient costs

(There could easily be delate about there are uses!)

Real GDP

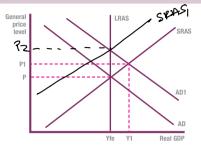
Actual GDP growth

Frend rate of growth

Time

#### The Neoclassical automatic adjustment mechanism

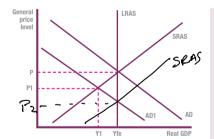
The diagram below shows a Neoclassical (monetarist) AD/AS diagram, following an increase in government spending. Adapt the diagram to show how the economy adjusts back to the full-employment level of output, according to Neoclassical economists. Explain the adjustment process in the space provided



#### Explanation

At Y1 the economy has a positive output gap. Factors of production e.g. labour have high bargaining power because they are in high demand. This causes a rise in production costs in turn causing a decrease in SRAS.

The diagram below shows a Neoclassical (monetarist) AD/AS diagram, following a decrease in government spending. Adapt the diagram to show how the economy adjusts back to the full-employment level of output, according to Neoclassical economists. Explain the adjustment process in the space provided



#### **Explanation**

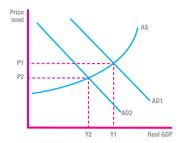
At Y1 the economy has a negative output gap. Factors of production e.g. labour have low bargaining power because they are in low demand. This causes a fall in production costs in turn causing an increase in SRAS.

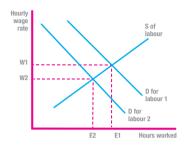
Explain why Keynesian economists believe that the economy is NOT self-adjusting:

Keynesians believe that wages are sticky downward I.e. will not adjust automatically. This means that labour markets do not clear or adjust and so unemployment may persist.

## **SECTION 2** MACROECONOMIC OBJECTIVES

1 Cyclical unemployment



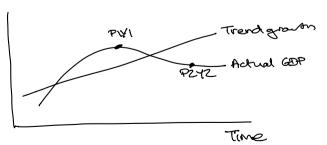


A Explain why the shift in the AD/AS diagram (above left) may result in the shift shown in the labour market diagram (above right)

Demand for labour is derived from demand for goods + services - if demand for autput feels (LH diagram) than domand for labour feels too (RH diagram)

B Draw an Economic Cycle (trend) diagram. On your diagram, indicate the position on the cycle that would match the two equilibrium points P1Y1 and P2Y2 on the AD/AS diagram above





C Identify four possible causes of the shift from AD1 to AD2

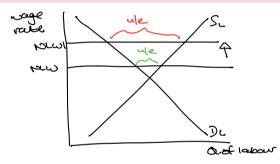
Increase'n income tax rates

Fall in business confidence

Increase in interest rates

Appreciation of the curreny

- 2 National Minimum Wage causing real wage unemployment
- A Draw a labour market diagram to show the impact of an increase in the National Living Wage



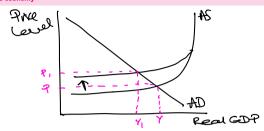
- B On your diagram above, indicate the increase in real-wage unemployment that results from the higher wage rate
- C Explain the possible economic effects on consumers, workers and businesses of an increase in the National Living Wage Rate

consumers Higher income : passibly more spending + confidence

Workers Those who retain their gobs reade more income so possibly more mornated. But some will become unemployed

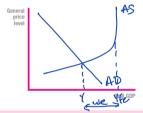
Businesses Rise in graduction costs so falling profits

D Draw an AD/AS diagram to represent the impact of an increase in the National Living Wage rate on the economy



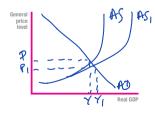
## 3 Types of unemployment

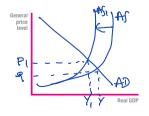
A Draw an AD/AS diagram that helps to illustrate cyclical (i.e. demand-deficient) unemployment B Draw an AD/AS diagram that helps to show the impact of long-term structural unemployment, as the skill-level and motivation of the unemployed decreases



General price level

Draw an AD/AS diagram to show the likely impact on the economy of an increase in net immigration of skilled workers  D Draw an AD/AS diagram to show the likely impact on the economy of rising economic inactivity rates

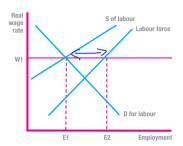




E Explain what is meant by real-wage inflexibility

wages, adjusted for inflation, do not adjust freely in the warrest mechanism

4 The natural rate of unemploymen



A Indicate the Natural Rate of Unemployment on this diagram

Between El and EZ

B Explain why the people who are potential workers, represented by that gap, would not be included in either the Claimant Count or the Labour Force Survey measures of unemployment

They are choosing voluntary not to work at that wage rate

### C List 5 policies that the government might use to try to narrow this gap

Improved children

Cheaper care for the eldery

Tax inerives for the 2nd earner in a family Improve below market flexibility eg. home warring

Oreaper transport -> improved geographical mobility

### 5 Inflation



According to this diagram, what was the approximate rate of inflation in:

A Early 1997

17-8= %

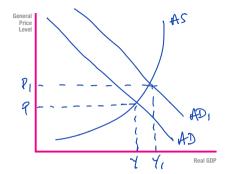
B Late 2009

22-1270=1070

### C Distinguish between deflation, disinflation, inflation and accelerating inflation

Deflation - falling average price level i.e. negative inflation Disinflation- falling inflation I.e. prices rising but less quickly Inflation - rising average price level Accelerating inflation - price level is rising increasingly quickly

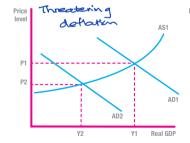
## D Draw an AD/AS diagram in the space below, to show the likely impact on the economy of an increase in the money supply

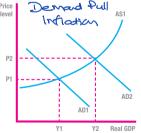


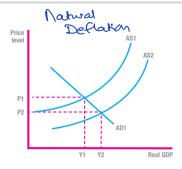
### 6 Inflation and Deflation

Study the four diagrams below. Then allocate each of them one of the titles from the list below:

- . Demand pull inflation
- Cost push inflation
- Natural ("benign") deflation
- Threatening ("malign") deflation







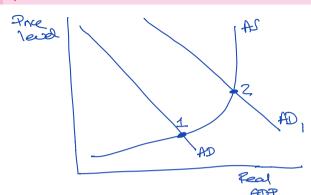


- 7 The Short-run Phillips Curves
- A In the space below, draw a diagram to show the trade-off between inflation and unemployment i.e. a short-run Phillips curve. Remember to show 'Wage Inflation %' on the vertical axis and 'Unemoloyment %' on the horizontal axis



- B On your diagram above, label two positions:
  - 1 U1W1 = low wage inflation of 2% and high unemployment at 8%
  - 2 U2W2 = high wage inflation of 8% and low unemployment of 2%

C Represent the same trade-off between unemployment and inflation on an AD/AS diagram in the space below:



D How might knowledge of the Phillips curve / the trade-off between unemployment and inflation be used by the government to help decide on macroeconomic policy?

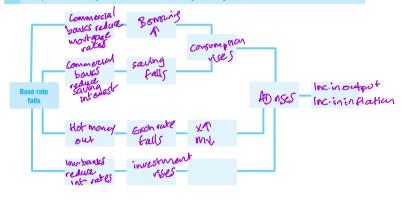
The gort needs to accide which objective to prioritise, as this theory suggests that they count both be advised at the same fine

E EXTENSION QUESTION: Add a second curve (i.e. another short-run Phillips curve) to your original Phillips curve diagram to show what will happen if workers come to expect a higher rate of inflation, as happened in the UK in the mid-1970s

## **SECTION 3** FINANCIAL MARKETS AND MONETARY POLICY

### 1 Monetary policy transmission mechanism

A The monetary policy transmission mechanism can demonstrate the links and relationships between changes in the base rate of interest ("Bank Rate"), and the price level and level of output in an economy. Complete the following transmission mechanism diagram using the terms in the boxes below

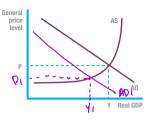


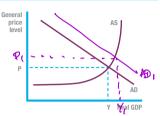




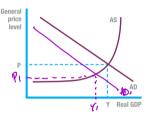
- B Adapt the AD/AS diagrams below to show the effects of each of the suggested changes to monetary policy
- i) An increase in the base rate of interest set by the Central Bank

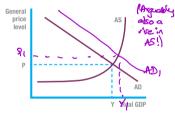




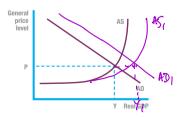


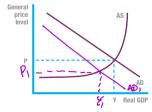
- iii) The use of foreign exchange reserves to buy the domestic currency in order to engineer an increase in its value
- iv) The use of Forward Guidance to indicate to businesses and households that interest rates are unlikely to rise further in the next 12 months





- v) The government introduces a Funding for Lending scheme, in which small businesses find it easier to gain access to credit from banks
- vi) The government decides to reduce the supply of narrow money in the economy





### EXTENSION QUESTION: Determination of interest rates in money markets

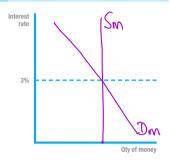
It is assumed in economics that the supply of money is determinedly exogenously (outside of this model) by the government and therefore when we draw the supply of money against interest rates, it is perfectly interest inelastic. The demand for money follows the normal law of demand: as the 'price' of money (the interest rate) rises, then demand for money falls.

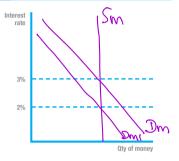
### Using the diagrams below:

- a Complete and fully label the diagram to show an equilibrium interest rate of 3%
- b A decrease in the demand for money amid fears of uncertainty in the economy, causing the equilibrium interest rate to fall to 2%

### A An interest rate of 3%

B A decrease in the demand for money amid fears of uncertainty in the economy causing the interest rate to fall to 2%





### C Suggest 3 factors that would likely cause the demand for money in an economy to increase

Rising confidence leading to more transactions inflation - households want to spent before progressively law neturns on assets from pring households to recommend to the progressively law neturns on assets from the progressively law neturns of the progressive law neturns of the p

What will happen to the equilibrium rate of interest if the money supply increases? Explain your answer Caron
The intrate should fall, ceters pointed pleasure
if it doesn't fall there would be
an excess supply of many

## E Outline the main factors considered by a Central Bank such as the Bank of England when deciding on its base rate of interest

The forus is often maintains from inflation toget, so they would consider any factors Whely to affect inflation e.g. confidence, stock levels, unemployment etc.

### F Distinguish between narrow money and broad money

namas: very liquid e.g. cash short tem

Broad: anything that, act some point, and be converted to cash

### 3 The equity market

### A Outline the main roles of financial markets

tacilitate souring Lending to businesses + households Facilitate exchange of goods + services Prande formores marcus Prande marcut for equities

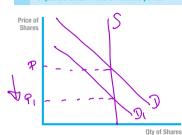
### B Explain what is meant by an 'equity market' (i.e. a market for shares)

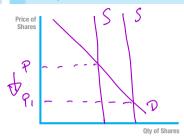
A francial marcet (a secondary marcet) in which shares can be barget + sold. shares are issued by firms as a way of raising france.

### C Outline other possible sources of finance that a business could use in order to fund investment / growth

- . Corporate band issue
- · Retain profits
- Bark loan
- · merger

- D Draw a diagram to show the impact on the share prices of a large firm if it announces a profit warning, following lower-thanexpected sales in the Christmas period
- E Draw a diagram to show the immediate impact on the share prices of a large firm if it decides to issue more shares in order to fund expansion



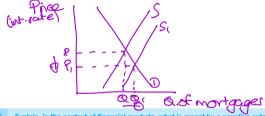


### 4 Market failure in the financial sector

1 A Explain, in the context of financial markets, what is meant by asymmetric information

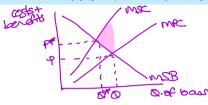
regardigative transportion than the other party (e.g. lender)

B Draw a diagram below to represent the market for mortgages in the UK. Illustrate the impact on this market if those wanting to take out mortgages are not completely honest with bank managers about their ability to afford the mortgage repayments



2 A Explain, in the context of financial markets, what is meant by a negative externali

Social costs > Private costs e.g. a toxic ban scub-prime debt: not only does the bandbarrower lose out it are barrower commenrepay but it may trigger reduced lending to Draw a diagram in the space provided below, to show the existence and impact of negative externalities in the market for payday loans, such as those provided by companies such as Wonga

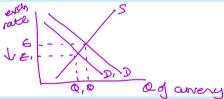


mancel, 1000 many payday loans one issued

3 A Explain what is meant by 'speculation'

Predicting future price charges, prompting buying Iseling actives today to take advantage of those pive drayes for a postit

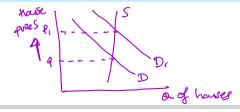
B On a foreign exchange market diagram, illustrate the impact on the market if currency speculators believe that the currency is likely to fall in value in the near future



4 A Explain what is meant by a house-price bubble

these pieces ise significantly more quiddy than their lay term growth rate, often as a result of speculation

B On a housing market diagram, show how a house-price bubble might occur



## **SECTION 4** FISCAL POLICY AND SUPPLY SIDE POLICIES

### 1 Fiscal policy and AD/AS

Match the following headings to the most appropriate diagram below. There may be more than one heading for some diagrams!

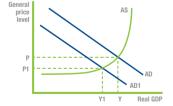
- A Rise in government spending on computer skills for apprentices
- B Fall in the size of the government budget deficit
- C Fall in National Insurance contributions paid by employees
- D Fall in government spending on infrastructure
- E Increase in the size of the government budget surplus
- F Decrease in the rate of VAT
- G Increase in excise duties charged on fuel
- H A boost to spending on transport due to increased use of public-private partnerships and PFI deals
- I A fall in the rate of corporation tax
- J Increased spending by the government on repaying the national debt to overseas investors
- K The government collects more tax revenue from high-earners and redistributes that amount to low-earners
- L Tax breaks for firms providing inwards foreign direct investment

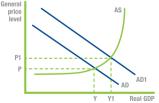
Headings:

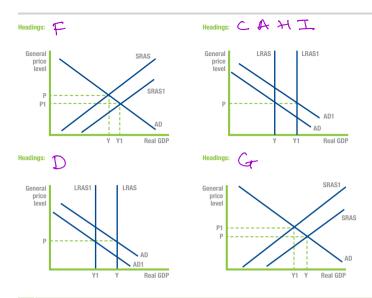
BEJ

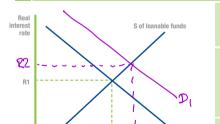
Headings:











01

**EXTENSION QUESTION: Fiscal Policy and Crowding Out** 

of loanable funds

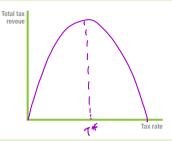
tionable funds

- Add a second 'Demand for Loanable Funds' curve to this diagram to show what happens if the government decides to increase its budget deficit
- B Explain what is meant by crowding out Spending by the goal pre-cents spending by the pollube. Local, either because introduction security of factors of production
- C Explain how this diagram could be used to illustrate why (financial) crowding out might occur

  Cost tweeases D for boos

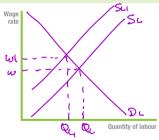
Cost increases D for bous raising intrates to RZ, which raises the cost of borraing to private time, reducing borrowing burness burness burnesses

Draw and fully label a Laffer Curve diagram on the axes below. Don't forget to indicate the "optimal tax rate"!



What effect might an increase in the rate of income tax have on the Supply Curve for Labour?

iii) Draw a Labour Market diagram on the axes below to illustrate the effect that you have described above



iv) Distinguish between regressive taxes, proportional taxes, and progressive taxes

Regressive: take a larger % of income of the poor, whereas progressive taxes take a larger % of income from the rich. Proportional taxes take an identical % of income regardless of income.

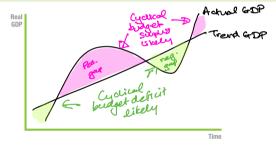
### v) To what extent does the Laffer Curve suggest that income tax rates should become more progressive?

Up to the optimal tax rate T\* thenit makes sense for those on higher income to pay a higher rate of tax. However beyond T\* the higher tax rate acts as a disincentive to work, and encourages tax evasion/avoidance, so there is little merit in raising tax beyond this point.

### i) Distinguish between a cyclical budget deficit and a structural budget deficit

A cyclical budget deficit occurs automatically in a recession, because tax revenue automatically declines and government spending automatically rises. The deficit should automatically be corrected when the economy starts to grow. However, a structural budget deficit is a result of discretionary fiscal policy in which the government persistently spends too much no matter the state of the economy.

Draw a trend diagram to represent the economic cycle, on the axes provided below



- iii) Indicate the periods in which the economy has a positive output gap and when the economy has a negative output gap
- iv) Indicate the periods in which the government will have a cyclical budget deficit and when the government will have a cyclical budget surplus
- v) Explain the difference between automatic stabilisers and discretionary fiscal policy

Automatic stabilisers occur automatically with the economic cycle rather than because of deliberate/ specific changes to government policy. Discretionary policy is a deliberate change e.g. change in the tax rate.

Distinguish between supply-side policies and supply-side improvements

A SSP is a deliberate policy/action taken by the government to improve the productive potential of the economy. A SSI is not a deliberate policy, but instead something that occurs intrinsically in the economy to improve the supply side - it can originate in he private sector.

Distinguish between free-market supply-side policies and interventionist supply-side policies

Free market SSPS involve less government intervention e.g. deregulation, increased openness to trade, privatisation etc. They can be inexpensive and can occur quite quickly. Interventionist policies involve Moore government spending/involvement in the economy.

Give 3 examples of free-market supply-side policies

Deregulation

Privatication

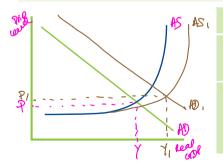
Remaral of taites quoters

Give 3 examples of interventionist supply-side policies

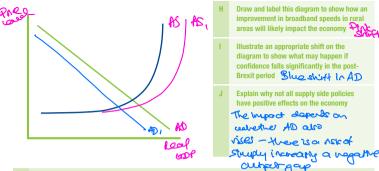
Impostion of move non-tailf borniers

increased environmental legislation

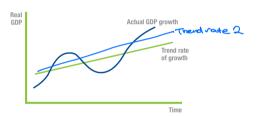
Increased labour moret negwatian



- Label this diagram to show the macroeconomic equilibrium
- Illustrate an appropriate shift on the diagram to show what may happen if the government increases its spending on retraining structurally unemployed persons
- Explain what may happen to the equilibrium price level of output over a period of 10 years Very with charge are all

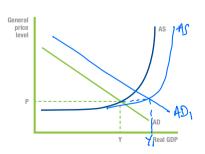


On the economic cycle diagram below, show how supply side policies might affect the trend rate of growth



Some demand-side fiscal policies also have supply-side effects. Give an example of such a policy, and show the effect of such a policy on the AD/AS diagram to the right

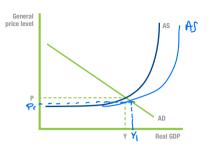
Reducing the roote of income fox courses Cto ise .: 10 Mes. But It may also example the economically income into DA 25 DE



Some supply-side policies require no government spending. Give an example of such a policy, and show the effect of such a policy on the AD/AS diagram to the right

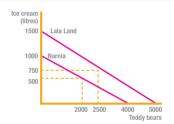
Example:

Deregulation of the transport industry



## SECTION 5 THE INTERNATIONAL ECONOMY

This diagram shows the production possibilities of two countries, Narnia and LaLa Land, each of which uses all available resources to make two products, ice cream or teddy bears



- Does either country have Absolute Advantage? Explain your answer
- If Narnia chooses to make 1,000 more teddy bears, what is the opportunity cost of that output decision?

lalaland can produce more of everything

250 cities of see cream

If LaLa Land decides to make another 300 litres of

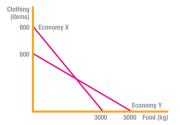
ice cream, what is the opportunity cost of that decision?

Does either country have a comparative advantage in either product? Explain your answer

1000 teddy bears

nashla has a lower approst in producing ke cream & caldad inteddy bears. namia has comp. advion secream + labaland in teddy bears

The production possibilities diagram below shows the possible combinations of food and clothing that can be produced by Economy X and Economy Y



- Calculate the opportunity cost in Economy X of i) producing food and ii) producing clothing
- 1) 3.75kg food

11) 0.27 items of doning

- Calculate the opportunity cost in Economy Y of i) producing food and ii) producing clothing
- 8.33 kg food
- 0.12 items of dorning
- Which country has a comparative advantage in the production of food?

Which country has a comparative advantage in the production of clothing?

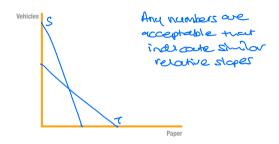
Does either country have an absolute advantage?

No

EXTENSION OUESTION: what is the range of terms of trade in which these 2 countries will trade with each other

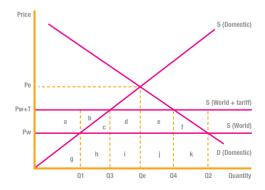
Anywhere between 3.75kg + 8:33kg of food per item of doney

In the space below, draw your own production possibilities diagram to represent two economies. Each economy produces both vehicles and paper. Economy S has a comparative advantage in production of vehicles. Economy T has a comparative advantage in production of paper. Neither country has an absolute advantage. Choose your own numbers to make this scenario work on your diagram!



### 2 EXTENSION QUESTION: Trade and Tariffs

The USA has imposed tariffs of 25% on imports of steel from China and the EU. The diagram below shows the impact of that tariff on the market for steel in the US. Study the diagram and then answer the questions that follow



What does each of the following areas on the diagram represent?

1 a+b

Additional domotic producer scuplus after the twiff

2 c+f

Deadweight welfare loss after the tenth

3 h+i+j+k

Revenue to averseas producers before the tariff

4 a+b+c+d+e+f

loss of consumer surplus after the tenth

5 d+e

Revenue to dameptic goult post-tariff

6 d+e+i+j

Total amount spect on M after the tart

7 6

Total cost of downers production before the touff

8 Pe x Qe

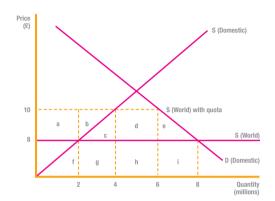
The dauestic marcet egin with no trade (Total revenue in this case)

9 Pw+T x Q4

Total spending on the good after the tailf

### **EXTENSION OUESTION: Trade and Ouotas**

This diagram shows the market for sweatshirts, with a quota being imposed to limit imports to 2 million units. Before the imposition of the quota, the equilibrium price was £8; after the quota the equilibrium rises to £10



Make some detailed notes about the economic effects on each of these stakeholders:

Price nees £2, consumer surles falls flyon

**Domestic produce** 

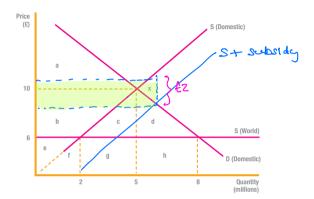
Production rises from 2 nto 4m, and froducer suplos rises by tom

Global producers (importers)

laikal revenue: g+h+ i new revenue: d+h

### **EXTENSION OUESTION: Trade and Subsidies**

This diagram shows a market in which the product can be produced domestically, but only for £10 each. This domestic price is much higher than the price of imports, at £6 each



- Describe the areas on the diagram that represent
- i) domestic consumer surplus

$$a+b+c+d$$

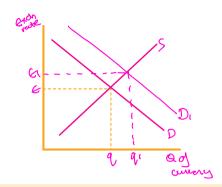
ii) domestic producer surplus

iii) the volume of imports

8m-2m=6m

- Add a new Domestic Supply curve to show the effect of a government subsidy of £2 per unit paid to domestic producers
- On the diagram, shade in the total amount of subsidy that the government will pay to the industry

5 Freely-floating exchange rate



- A Label this diagram to show how a floating exchange rate is determined in the foreign exchange market
- B Illustrate an appropriate shift on the diagram to show what may happen if the central bank of the country decides to raise the base rate of interest
- C Give 2 other possible factors that could cause the same shift / movement on the diagram

Speculation: besief that the cermoncy will rise in

Increase in sales of exparts

D Distinguish between an appreciation and a depreciation

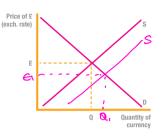
Appreciation: our increase in the currency is value against others Depreciation: a decrease in the currends value

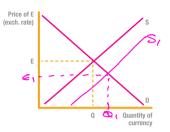
E Explain what may happen to the current account of the balance of payments, ceteris paribus, as a result of the change shown

X become more expensive and M relatively decrease in the valuely not expects so wassering current account deficit

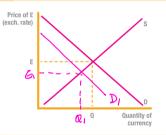
For each of the scenarios given below, illustrate the effect on the exchange rate diagram.

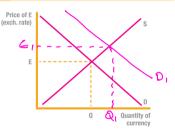
- F An increase in interest rates in other, stable
- G An increase in speculation AGAINST the  $\mathfrak L$ , as currency traders expect the value of the  $\mathfrak L$  to fall



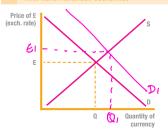


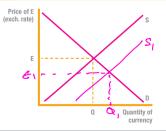
- H A worsening of the trade deficit as UK households buy more goods and services from the US and EU
- An increase in inwards FDI (i.e. long-term capital flows) to the UK economy





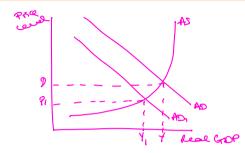
- J A rise in the value of UK exports as the UK government agrees new trade agreements with North American economies
- Currency traders sell £s as they seek to buy the Japanese Yen, which they believe is going to appreciate in the near future





### 6 The exchange rate and trade

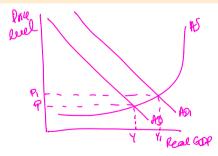
In the space provided, draw an AD/AS diagram to show how an appreciating exchange rate might affect an economy that has a surplus on its current account of the balance of payments



B Name two economies for which this might be the case

nemerandos Germany arina

C In the space provided, draw an AD/AS diagram to show how a depreciating exchange rate might affect an economy with a deficit on its current account of the balance of payments

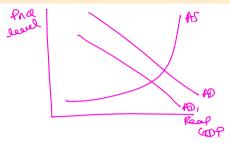


D Name two economies for which this might be the case

UK

USA

E In the space provided, draw an AD/AS diagram that shows the likely impact on an economy that is experiencing an improvement in its terms of trade index

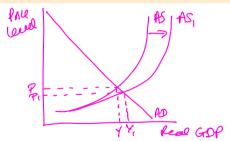


F Give 2 reasons why an economy might experience an improvement in its terms of trade

Rising D for exports
Remard of tarts

### 7 National income and the balance of trade

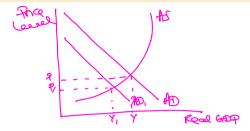
A Draw an AD/AS diagram and show the equilibrium levels of Real National Output and the Price Level



- B Add a line or curve to the diagram to show the likely effect of an increase in inwards Foreign Direct Investment
- C Which account on the Balance of Payments would be directly affected, following this increase in inward Foreign Direct Investment? Explain your answer

Financial account ( lay town captral Mass)

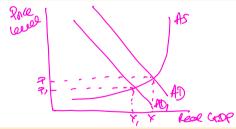
D Draw an AD/AS diagram and show the equilibrium levels of Real National Output and the Price Level



- E Add a line or curve to the diagram to show the likely effect of a recession in one of the main export markets for the economy depicted
- F Which account on the Balance of Payments would be directly affected, as a result of this recession in one of the economy's main export markets? Explain your answer

Current account (northe Balance of Trade)

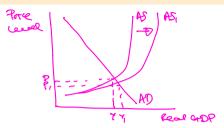
G One method that governments can use to reduce a trade deficit is to implement "expenditure-reducing policies". This type of policy aims to reduce household income, so that households spend less on imports. Draw an AD/AS diagram in the space below to show the effect of an expenditure-reducing policy on the economy



H Governments can also use supply-side policies to reduce a trade deficit. Explain, giving at least one example, how supply-side policies may reduce an economy's trade deficit

Improved transport infrostructure could reserve production costs (of raw materices + finished products) improving international processor compensationers, as well as making it earner for finished products to reach parts (transport hurses

Draw an AD/AS diagram in the space below to show the effect of supply-side policies intended to reduce a trade deficit



8 Fixed exchange rates

A Distinguish between fixed exchange rate systems and floating exchange rate systems

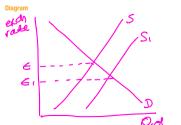
Fixed: value of convery against other fixed out a predeterined rate by the got - it is maintained by the got tout

Ploating: value of the contact eleterised by DISin The

B Suggest possible reasons why a government may want its currency to devalue (i.e. fall) against other currencies

-wave gra competitive exports, which could stimulate HD

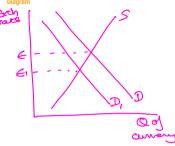
C One way in a government / central bank can cause its currency to be devalued is to increase its purchase of foreign currency. Using an exchange rate diagram, explain how this process works



Buying fereign commeny requires supplying dances we comercy in

Another way in which a government / central bank can cause its currency to be devalued is to reduce domestic interest rates, in order to attract less hot money. Using an exchange rate diagram, explain how this process works

Diagram



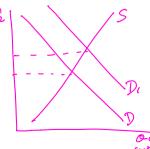
Famos averseas investors wall wout to put their warey who cake accounts it int. rates are lower, therefore they will not read to buy or much of the armery.

Sometimes, a government may want its currency to be stronger relative to other currencies. Outline the reasons why this might be the case

· Cause imports to be relatively cheaper 5 could be row materials (capital Ly could be essential items eg. footh wedsine

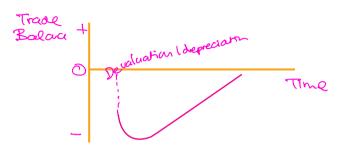
One way in which a government / central bank can cause a revaluation of its currency is to sell its foreign currency reserves. Using an exchange rate diagram, explain how this process works

Diagram



Foreign current resources are raid in order to buy danestic currency

Label this diagram, which shows the possible effects of a change in the exchange rate on the balance of trade, over time



According to economic theory, do you think that this country's exchange rate has appreciated or depreciated? Explain your answer

Depreciated - the trace balance affinatoly impraiss, so there are mare I and fewer M. There is initially a time by due to include PED

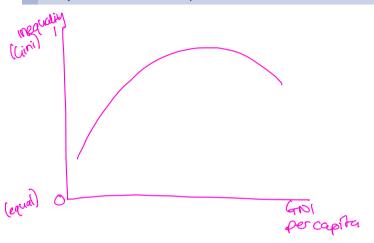
Under what circumstances may the effect shown here not happen?

If Demand for X and M is relatively price elogik ever in the shat run

## **SECTION 6** INEQUALITY AND DEVELOPING ECONOMIES

1 EXTENSION QUESTION: Kuznets curve

A A Kuznets curve plots GNI per capita along the x-axis and inequality (usually using the Gini coefficient) on the y-axis. Draw the relevant axes in the space below:



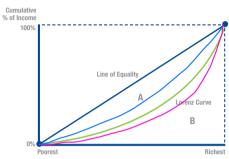
- B On your axes above, now draw a Kuznets curve. A Kuznets curve suggests that inequality often rises during a phase of rapid industrialisation and urbanisation but there may come a point when increased welfare provision, progressive taxes and more balanced income growth across industries might lead to a fall in overall inequality at higher per capita incomes
- C Carry out research to find a list that ranks countries by their Gini coefficient and find:

i) one country in the lowest 10%

- ii) one country just below the middle of the ranking
- iii) one country just above the middle of the ranking
- iv) one country in the highest 10%; and finally
- v) indicate the likely position of each of those countries on the curve that you have drawn

### 2 The Lorenz Curve

The diagram shows a Lorenz Curve



Households by Income - Quintile Distribution

A Explain the meaning of the 'Line of Equality' across the middle of the diagram

Perfectly equal distribution of Income ine. everyone has exactly the same income

B What does the Lorenz curve illustrate?

The dishibution of income

C EXTENSION QUESTION: with reference to the labelling of areas shown on this graph, what is the formula for calculating the Gini Coefficient?

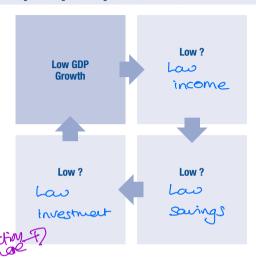


- Using a different colour pen or pencil, add a second Lorenz curve to this diagram to show an economy with greater inequality than the one currently shown
- E Using another different colour pen or pencil, add a third Lorenz curve to this diagram to show the impact of more progressive income tax rates

  \*\*Blue Cive\*\*

### 3 The Harrod-Domar model of development

Complete the labelling of this diagram showing the Harrod-Domar model



Which constraints on Growth and Development can be illustrated by using this model?

· Poor financial infradructure · Low confidence in financial markets

Add to the diagram to show how an injection of aid may help to overcome this constraint, and explain that effect of that aid on a country such as Honduras or Rwanda.

Explanation:

Add can raise investment i.e. build capital stock

### 4 Factors influencing growth and development

Many developing countries are highly dependent on primary products. Using your knowledge of price elasticity of demand and price elasticity of supply, use a demand and supply diagram to show why increasing specialisation in primary products can cause falling revenue in developing countries

Mysel revenue:

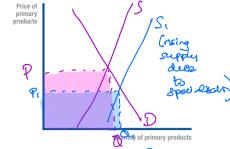
B Using the axes to the right, explain why commodities often have highly volatile prices

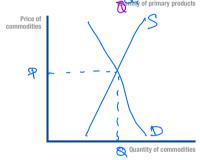
SID are relatively price indecent 100 at the charge in Either Sand leads to a laye charge in

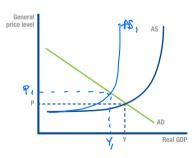
capital flight might occur in a developing economy. Then, on the axes to the right, show the effect of this on the economy of a developing economy.

Capital is often assorbed as "footbore" insearch of the best return. If the rates use in the Last, or there is more working instability, capital will leave

In the space below, explain why

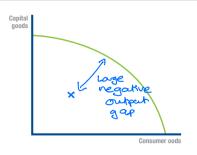






D On the PPF, illustrate the effect of poor education and skill levels of the working-age population in a developing economy

The laye regarder output gap will reduce the amount of capital produced. This could welfwootely cause the PPF to shift inwards.



## **NOTES**

Scan this QR code with your smartphone camera to access a PDF document with suggested answers to each activity in this Edexcel A-Level Economics Diagram Practice Book.



SKU: 02-4130-30188-01

**Study Notes I Revision Videos I Exam Technique Advice** You'll find everything you need for Edexcel A Level Economics at:

# www.tutor2u.net/economics

Follow tutor2u Economics on Twitter:



**Please note:** this printed resource is NOT LICENSED for schools or colleges to reproduce the content, either by photocopying, scanning, or any other means of digital reproduction.