



GCE AS MARKING SCHEME

SUMMER 2022

**AS
ECONOMICS - COMPONENT 2
B520U20-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2022 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GENERAL MARKING GUIDANCE

Positive Marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme, nor should marks be added as a consolation where they are not merited.

For each question there is a list of indicative content which suggest the range of business concepts, theory, issues and arguments which might be included in learners' answers. This is not intended to be exhaustive and learners do not have to include all the indicative content to reach the highest level of the mark scheme.

The level-based mark schemes sub-divide the total mark to allocate to individual assessment objectives. These are shown in bands in the mark scheme. For each assessment objective a descriptor will indicate the different skills and qualities at the appropriate level. Learner's responses to questions are assessed against the relevant individual assessment objectives and they may achieve different bands within a single question. A mark will be awarded for each assessment objective targeted in the question and then totalled to give an overall mark for the question.

GCE AS ECONOMICS - COMPONENT 2

SUMMER 2022 MARK SCHEME

1. (a)	Explain one advantage of an economy specialising at a national level. [4]	
Band	AO1	AO3
	2 marks	2 marks
	<i>Is specialisation understood?</i>	<i>Is the advantage explained?</i>
2	2 marks Good understanding Clear understanding specialisation at a national level	2 marks Good analysis Developed lines of analysis making use of economic theory to explain an advantage of an economy specialising at a national level/macro level
	1 mark Limited understanding Less accurate understanding of specialisation at a national level – most likely focusing on micro understanding	1 mark Limited analysis Developed lines of analysis making use of economic theory to explain and advantage in terms of micro-economics
0	0 marks No valid understanding	0 marks No valid analysis

Indicative content:

AO1

Specialisation takes place when a country produces a narrow range of goods or services

AO3

Specialisation over time helps an economy develop a comparative cost advantage in producing goods and services, helping exports/trade

Specialisation can also mean that individual countries can produce certain goods that they are more efficient at producing and then exchange them with other countries.

Specialisation and trade mean that countries that produce no oil can consume oil products and countries with large reserves of raw materials can export them in exchange for other goods that they need. This helps reduce the problem of scarcity in individual countries and enables countries to operate outside of their PPFs.

If there is increased trade there will also be increased competition. This means that domestic monopolies will now face competition from abroad, therefore, they have increased incentives to cut prices and be efficient. Increasing potential output and potential GDP or GDP per capita.

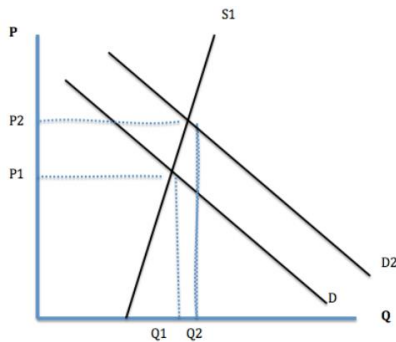
1. (b)	Using diagram, analyse reasons why oil prices are volatile. [6]	
Band	AO1	AO3
	4 marks	2 marks
	<i>Are diagrams correct?</i>	<i>Are reasons identified and explained?</i>
3	<p>4 marks Excellent understanding</p> <p>Two diagrams or one diagram showing both demand and supply changes and takes into account elasticity of supply and demand</p>	
2	<p>2-3 marks Good understanding</p> <p>Top of band: One diagram showing a good understanding with demand changing leading to a change in price OR Supply changing leading to a change in price – but taking into account either inelastic supply or inelastic demand</p> <p>Bottom of band: one diagram showing a change in demand or supply</p> <p>One error on labelling the diagram allowed</p>	<p>2 marks Good analysis</p> <p>Developed lines of analysis making use of economic theory to explain why prices can be volatile in terms of unexpected changes in demand/supply</p>
1	<p>1 mark Limited understanding</p> <p>One diagram showing limited understanding. For example, a diagram with a double shift</p>	<p>1 mark Limited analysis</p> <p>Partial analysis, but its use of economic theory is superficial either focusing on simple demand or supply shifts</p> <p>OR why demand and supply is so inelastic</p>
0	<p>0 marks No valid diagram</p>	<p>0 marks No valid analysis</p>

Indicative content:

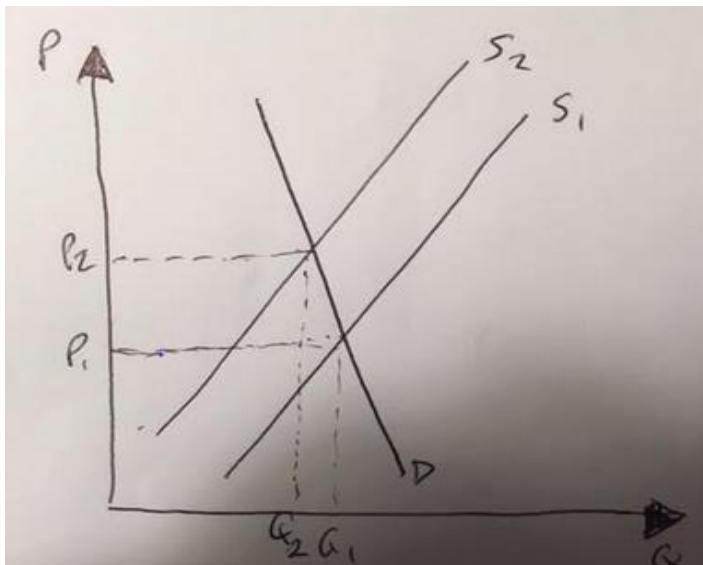
AO1

Diagrams indicating why the price of oil is volatile:

Showing demand changing (probably increasing) with PES being inelastic



Showing supply changing (probably decreasing) with PED inelastic



AO3

Demand:

Demand can change with changes in global economic growth as oil is income elastic. If there is economic growth in the global economy, there will be greater demand for oil both for transport of goods and services and for oil related products.

The role of speculators in commodity markets could be discussed and how they can increase or decrease demand in commodity markets. Speculators buy and sell oil futures over future expectations. If they expect higher demand in the future, they will buy oil futures, pushing up price.

Supply is inelastic in short term. If there is a sudden rise in demand, it takes time for producers to increase supply. It is not always possible to supply more because it depends how much oil is in the ground and the time taken to find new sources.

Supply:

If there is a sudden decrease in demand OPEC could in theory intervene and alter supply to target certain prices, but in practise it is difficult due to arranging the meeting and ensure agreement in the cartel.

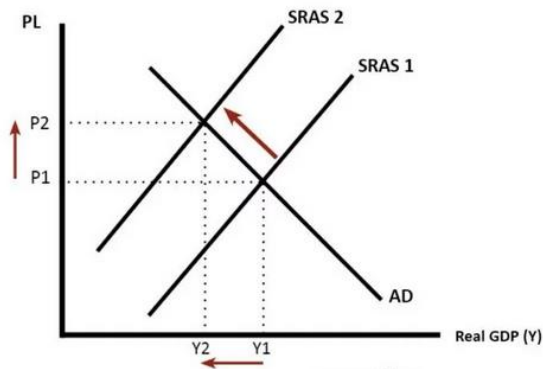
Supply can change unexpectedly due to shocks in the output of oil producing economies such as political instability, natural disasters or sanctions. This would decrease the supply of oil on world markets.

Demand for oil is inelastic in the short-term due to the necessity for transport logistics and oil related products.

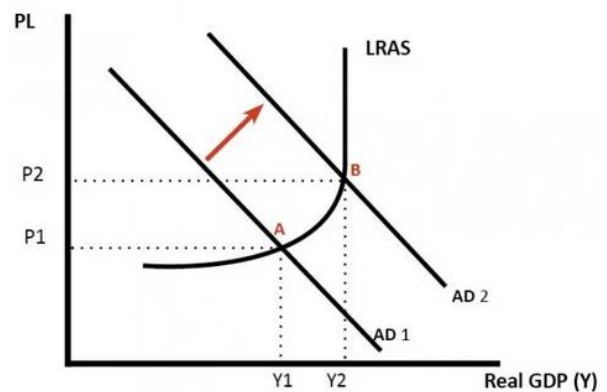
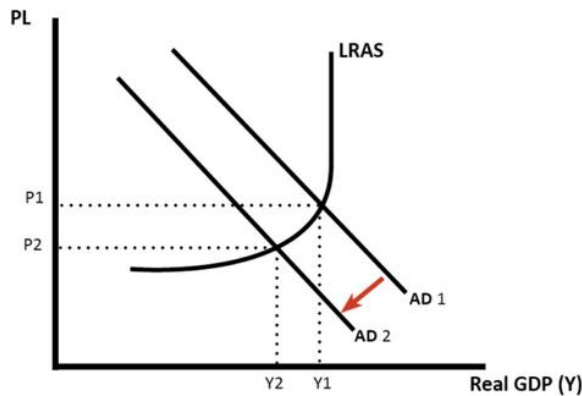
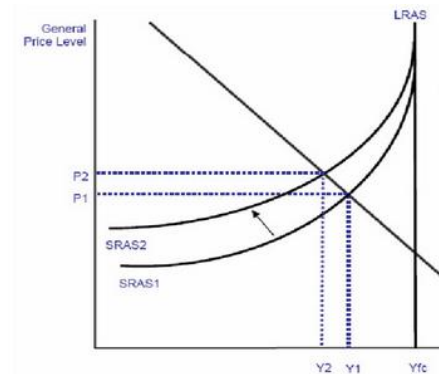
1. (c)	Using AD/AS diagrams, discuss the effects of higher global oil prices on a country's inflation rate. [8]		
Band	AO1	AO3	AO4
	4 marks	2 marks	2 marks
	<i>Are diagrams correct?</i>	<i>Is the impact of higher oil prices explained?</i>	<i>Is the answer debated and judged?</i>
2	3-4 marks Good understanding Strong use of AD/AS diagrams to show 2 different underlying reasons for inflation change	2 marks Good analysis Developed lines of accurate analysis explaining how higher oil prices could influence a country's inflation rate	2 marks Good evaluation A reasoned judgement on the likely impact of higher global oil prices for a country's inflation Counter argument(s) are present and developed
	1	1-2 marks Limited understanding Use of a diagram to illustrate inflation change The diagram is limited in scope or contains significant labelling errors	1 mark Limited analysis Limited development of how higher oil prices could influence a country's inflation rate Use of economic theory is underdeveloped and explanations are superficial
0	0 marks No valid diagram	0 marks No valid analysis	0 marks No valid evaluation

Indicative content:

Diagrams: cost push



Or



AO1

AD/AS Diagram indicating higher cost push inflation with AS shifting up due to higher oil/petrol prices.

AD/AS Diagram indicating higher or lower demand pull inflation due to higher oil/petrol prices.

AO3/AO4: Answer is reversible

more cost push inflation: higher oil prices increase the cost of transport and lead to higher costs for business, this leads to higher costs of production and output contributing towards higher inflation rates

But the price of other goods in the basket of goods could lower making the impact of higher oil prices and petrol prices less significant to the inflation rate

Consumers see an increase in cost of transport and heating, leading to lower discretionary incomes which could lead to lower consumption leading to lower gdp

Higher oil prices could lead to higher investment from oil producers in oil producing countries leading to more AD and increased demand pull inflation.

Depends on if the country is a net importer of exporter of oil

If you are a net importer of oil and oil related products then the value of imports may rise faster than the value of exports leading to worse trade deficit and decrease in AD.

Given the extent that oil is used in transport and oil related products it is highly likely that an increase in oil price will be significant in more inflation, and counter act other factors that could be decreasing inflation rates such as high unemployment.

If you are a net exporter of oil, then higher prices can lead to more incomes for oil companies in those countries, increasing revenues and profits. Thus business investment may rise leading to more AD and more demand pull inflation. BUT in long run more investment could lead to increased productive potential (LRAS) and less inflationary pressure.

If a net exporter then higher oil prices can lead to higher demand for the countries currency, leading to an appreciation in the currency and less expensive imports – lowering cost push inflation.

May also depend on other factors such as government and central bank macroeconomic policies to control AD.

1. (d)	Consider whether the Nigerian Government is right to keep its exchange rate artificially above its equilibrium level. [8]		
Band	AO2	AO3	AO4
	2 marks	3 marks	3 marks
	<i>Is the answer in context?</i>	<i>Are benefits fully explained?</i>	<i>Is the answer debated and judged?</i>
		<p>3 marks Excellent analysis</p> <p>Detailed lines of analysis explaining how holding exchange rates artificially above their equilibrium could be beneficial for an economy in terms of price of exports or price of imports</p>	<p>3 marks Excellent evaluation</p> <p>A reasoned judgement as to the extent to which holding exchange rates artificially above their equilibrium is beneficial for the Nigerian economy</p> <p>The evaluation is clearly set in the context</p>
2	<p>2 marks Good application</p> <p>The data is used effectively to support the argument</p>	<p>2 marks Good analysis</p> <p>Developed lines of analysis explaining how holding exchange rates artificially above their equilibrium could be beneficial for an economy in terms of price of exports or price of imports</p> <p>OR price stability</p>	<p>2 marks Good evaluation</p> <p>A clear judgement as to the extent to which holding exchange rates artificially above their equilibrium is beneficial for the Nigerian economy</p> <p>Counter argument(s) are present and developed</p> <p>Answer may have brief end judgment</p>
1	<p>1 mark Limited application</p> <p>The data is used, but its use is underdeveloped, taking the form of occasional reference rather than forming strong supporting evidence</p>	<p>1 mark Limited analysis</p> <p>The use of economic theory is underdeveloped and explanations are superficial</p>	<p>1 mark Limited evaluation</p> <p>Counterpoints are present, but none of them are developed.</p> <p>Judgement (s) that is/are unsupported will be in this band</p> <p>or a supported one-sided judgment</p>
0	<p>0 marks No valid application</p>	<p>0 marks No valid analysis</p>	<p>0 marks No valid evaluation</p>

Indicative content:

AO2

Use of the data to show how the inflation rate has increased as the currency has depreciated

Western multi-nationals producing fast-moving consumer goods such as Cadbury, Coca-Cola and Guinness operate in the country, any further depreciation would harm the price of imported supplies or machinery.

The data suggests Government debt as a % of GDP rising. If government borrowing is in \$ then keeping the Naira's exchange rate above equilibrium is beneficial.

Stable currency can lead to increased confidence, which would allow the FDI from foreign firms Cadbury, Coca-Cola and Guinness to continue.

Oil prices have fallen in US\$ terms harming the profits of oil producing companies in Nigeria.

AO3

Lower cost push inflation will lead to better household welfare as the cost of imported finished goods will be not as expensive as if the currency depreciated fully, therefore more consumption than otherwise

lower prices for imported capital goods than they would be if the currency depreciated fully. This helps manufacturers replace old capital and become more productive/efficient leading to increased productive potential/potential gdp.

If government borrowing is in US dollars then keeping the Naira's exchange rate above equilibrium is beneficial as it means less of the domestic currency will need to be exchanged for dollars to payback the debt.

If selling oil in US\$ then keeping the exchange rate above equilibrium protects the income of oil producing businesses in Nigeria that will be paid in Naira.

Decreased volatility in the exchange rate and so can increase confidence both domestically and internationally.

AO4

But exports would be cheaper for foreign buyers if the currency was to depreciate fully, so leading to worsening net exports volume – but depends on if measuring net exports by volume or value. If value then given PED for main export is inelastic then net export value could increase.

Foreign investment will be more expensive than it would be if the currency was to depreciate fully, leading to less benefits than could be possible.

Answers may judge that it depends on the extent to which Nigeria is reliant on exports or imports (ie net exporter or net importer. Nigeria main exports are primary products with inelastic PED, so a depreciation in the currency is likely to be harmful due to less revenue from exports and it will make imports significantly more expensive. So in the case of Nigeria it is probably very beneficial to keep the exchange rates above the equilibrium.

It may also depend on how much greater than equilibrium the valuation is kept – according to the data it appears much higher and so impactful.

May depend on the other uses for the foreign capital reserves that would be used to keep the exchange rate above equilibrium - so their opportunity cost.

1. (e)	Outline possible reasons for a country's GDP being greater than GNP. [4]								
	<p>AO1: 4 marks</p> <table border="1" data-bbox="339 315 1398 488"> <thead> <tr> <th data-bbox="339 315 1273 360"></th> <th data-bbox="1273 315 1398 360">Marks</th> </tr> </thead> <tbody> <tr> <td data-bbox="339 360 1273 405">2nd reason outlined</td> <td data-bbox="1273 360 1398 405">1</td> </tr> <tr> <td data-bbox="339 405 1273 450">One reason outlined</td> <td data-bbox="1273 405 1398 450">2</td> </tr> <tr> <td data-bbox="339 450 1273 488">Understanding of difference between GDP and GNP</td> <td data-bbox="1273 450 1398 488">1</td> </tr> </tbody> </table> <p>Indicative content:</p> <p>AO1 for reason and development (development does not need to be contextualised but may be used to help support their reason) GNP and GDP both reflect the national output and income of an economy but the GNP (Gross National Product) takes into account net income receipts from abroad. (GDP + net income from abroad)</p> <p>Repatriation of profits: If a multinational produces goods/oil in Nigeria, this production will be counted towards Nigerian GDP. However, if the mutli-national firm sends profits back to shareholders outside of Nigeria, then this outflow of profit is subtracted from GNP. Nigerian nationals don't benefit from this profit which is sent back to Japan.</p> <p>Context may be used to back up reasoning: If a Multi-national firm from Ireland (Guinness) makes a profit from companies located in Nigeria, then if this profit is returned to nationals within the home country of the multi-national, then this net income from overseas assets will be added to Ireland GNP.</p> <p>International factors of production: GNP takes into account the value of products created by Nigeria factors of production at home and abroad and this is less than the value of goods and services produced in Nigeria by Nigerian factors of production and international factors of production.</p>		Marks	2nd reason outlined	1	One reason outlined	2	Understanding of difference between GDP and GNP	1
	Marks								
2nd reason outlined	1								
One reason outlined	2								
Understanding of difference between GDP and GNP	1								

1. (f)	Using the data, discuss whether the fiscal and monetary policies being implemented by Nigeria in 2018 (lines 19-23) could improve its economic performance.			[10]
Band	AO2	AO3	AO4	
	4 marks	3 marks	3 marks	
	<i>Is the answer in context?</i>	<i>Are the impacts of policies explained?</i>	<i>Is the answer debated and judged?</i>	
3	4 marks Excellent application The data is used very effectively to support arguments on how macro-economic policies being implemented in 2018 will improve Nigeria's economic performance Answer is thoroughly embeded in the context and data table	3 marks Excellent analysis Detailed lines of analysis explaining how fiscal/fiscal supply-side and monetary side policies can improve Nigeria's economic performance All stages in the process are fully explained. Demand and supplyside analysed	3 marks Excellent evaluation A reasoned judgement as to the extent to which the fiscal/fiscal supply-side and monetary side policies might improve Nigeria's economic performance The evaluation is clearly set in the context	
	2-3 marks Good application The data is used effectively to support arguments on how macro-economic policies being implemented in 2018 will improve Nigeria's economic performance using text and data table	2 marks Good analysis Developed lines of analysis explaining how the fiscal/fiscal supply-side or monetary side can improve Nigeria's economic performance One policy done well or two done with stages in the process are not fully explained Demand or supplyside analysed	2 marks Good evaluation Counter arguments are present and developed Judgement(s) as to the extent to which the fiscal/fiscal supply-side and monetary side policies might improve Nigeria's economic performance Answer may have brief end judgment	
1	1 mark Limited application The data is used, but its use is underdeveloped, taking the form of occasional references from the text or table rather than forming strong supporting evidence	1 mark Limited analysis The use of economic theory is underdeveloped; explanations are superficial	1 mark Limited evaluation Counterpoints are present, but none of them are developed. Judgement (s) that is/are unsupported will be in this band or a supported one-sided judgment	
0	0 marks No valid application	0 marks No valid analysis	0 marks No valid evaluation	

Indicative content:

AO2

Policies being implemented include:

Large supply-side/fiscal supply-side policy; June 2018 President Muhammadu Buhari signed a budget of 9.1 trillion Nigerian Naira, the nation's biggest yet, focused on increasing investment in roads, rail, ports and power to address infrastructure decay.

Monetary: the central bank pledged to lend cheaper money aimed at financing projects in agriculture and manufacturing.

But interest rates still high the central bank has kept its base interest rate at a record high of 14 per cent since 2016 to fight high inflation that was still 11.1 per cent in July 2018, above target.

Data from the table used to support arguments – such as ease of doing business survey, budget deficit

Ex rate depreciating causing cost push inflation

The economy at the moment faces economic disruption due to the lower price of oil; Volatile prices of oil if they fall can cause lower value of exports for Nigeria, leading to worse net exports and thus a decrease in aggregate demand, leading to a decrease in GDP. Volatile prices of oil if they fall can cause lower profits for the domestic oil industry leading to less investment AD and long term increases in AS. Volatile prices can increase uncertainty over future profits which makes domestic investment and FDI less likely impacting AD and long term increases in AS. Volatile prices can increase uncertainty for domestic income due to uncertainty of jobs which can lower confidence and consumption. Volatile prices can lead to uncertainty over future tax revenues affecting future spending plans to help economic growth.

AO3

The fiscal supply-side policy appears to provide a large fiscal boost which will be increased by the multiplier effect, creating jobs and investment by private firms. Thus increasing AD and GDP.

More Jobs will also lead to more income for households allowing them to increase consumption and their welfare/standard of living.

Supply-side: helps to address the infrastructure decay and helps firms in Nigeria be more efficient and productive, lowering their unit costs and making them more competitive overseas. Thus increasing exports and trade surplus.

May also attract more international firm investment

In the long run Supply side policies may help Nigeria counter the inflation caused by the depreciating exchange rate

Improved infrastructure may encourage manufacturing to grow, helping the economy to diversify away from oil

Monetary: cheaper finance to encourage investment from firms in agriculture and manufacturing to aid diversification away from oil.

AO4

Fiscal boost: However – many of these contracts may be taken by international construction firms limiting the increased investment by domestic businesses and profits may be repatriated

Supply-side: firms lower unit costs and making them more competitive overseas would be even more useful due to the weakened ex rate.

Supply-side – no guarantee the money will be effectively used, could build infrastructure that is not required/useful

Monetary – although the central bank “pledged” to lend – no guarantees it actually did or that firms took the bank up and borrowed the money for investment purposes.

Interest rates –The high interest rate is not necessarily going to help achieve economic growth due to high cost of borrowing limiting domestic investment and encouraging saving limiting consumption, but it could help stabilise the ex rate at a higher value than otherwise limiting cost push inflation.

Inflation is high due to the low ex rate.

The real issue for the Nigerian economy is that they are susceptible to volatile prices of oil – which impacts the economy dramatically. Any efforts to help the economy diversify away from oil should help improve the economy in the long run.

However – will it be that easy to move the economy from a reliance on oil exports as 90% of export income originates from oil

Also lower oil prices could also be only a short term factor.

A lack of government spending on infrastructure has not helped in rebalancing the economy so far but its still only recent increased on spending in these areas.

2. (a)	Outline how an absence of property rights is a type of market failure. [4]	
Band	AO1	
	4 marks	
2	Good understanding A clear link showing how property rights leads to market failure, in regards less barriers to use or control	3-4 marks
1	Limited understanding Understanding of absence of property rights and market failure (definitions of each)	1-2 marks

Indicative content:

Absence of property rights allow free-riders uncontrolled access, which can result in the over-exploitation or misuse of the resource. Many resources that are directly, or indirectly, used in an exchange have no specific or identifiable owner, and are collectively available for everyone to use.

Market failure is where free markets fail to allocate scarce resources efficiently (not maximising consumer and producer surplus at the free market equilibrium output)

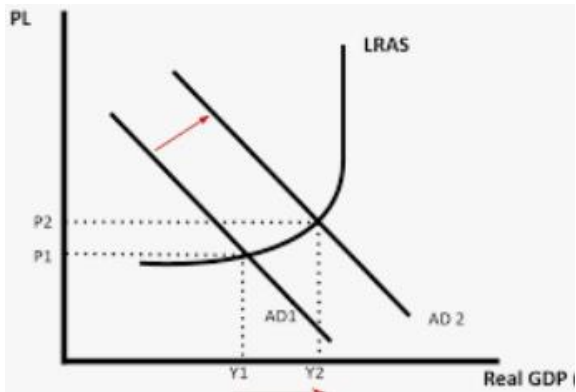
Markets are efficient at producing private goods, largely because producers and consumers have the right of ownership of the resources exchanged in an economic transaction involving a private good. However, markets are less efficient when property rights do not exist

2. (b)	Using a diagram, discuss whether government subsidies for new environmentally friendly businesses and technology will be beneficial for the UK economy. [8]		
Band	AO1	AO3	AO4
	2 marks	4 marks	2 marks
	<i>Is the diagram accurate?</i>	<i>Are the macro economic benefits of subsidies of both explained?</i>	<i>Is the answer debated and judged?</i>
3		<p>4 marks Excellent analysis</p> <p>Detailed lines of analysis using economic theory to explain macro economic impacts of subsidies for both new businesses and new technology</p> <p>All stages in the process are fully explained.</p>	
2	<p>2 marks Good understanding</p> <p>Integrated use of diagram to illustrate the macro economic impact or micro subsidies diagram</p> <p>There are no meaningful errors.</p>	<p>2-3 marks Good analysis</p> <p>Developed lines of analysis making use of economic theory to explain macro economic impacts of subsidies for both new businesses or new technology</p>	<p>2 marks Good evaluation</p> <p>Counter arguments are present and developed</p> <p>Judgement(s) as to the how beneficial subsidies will be for the UK economy</p>
1	<p>1 mark Limited understanding</p> <p>Non-integrated use of diagrams to illustrate macro/micro economic impact</p> <p>The diagram is limited in scope or contains significant labelling errors or is not integrated</p>	<p>1 mark Limited analysis</p> <p>There is limited chain of reasoning of the macro or micro economic impacts subsidies for one of new businesses/ new technology</p>	<p>1 mark Limited evaluation</p> <p>Counterpoints are present, but none of them are developed.</p> <p>Judgement (s) that is/are unsupported will be in this band</p> <p>or a supported one-sided judgment</p>
0	<p>0 marks Diagram is not valid</p>	<p>0 marks No valid analysis</p>	<p>0 marks No valid evaluation</p>

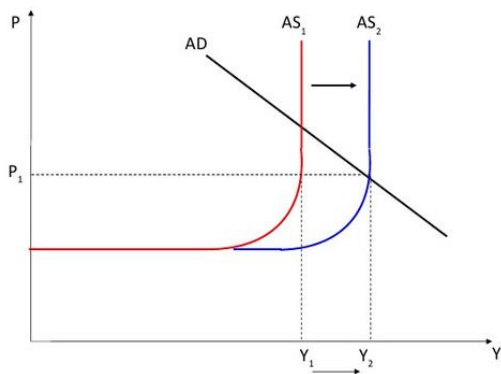
Indicative content:

AO1

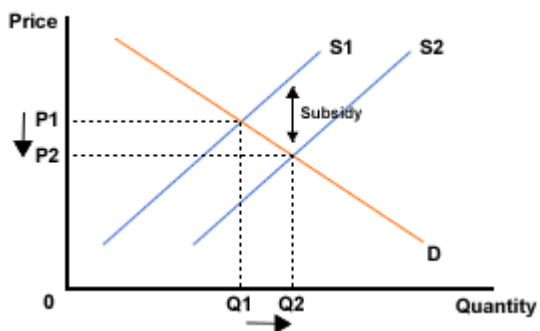
AD/AS diagram indicating a shift out in AD due to an increase in govt spending (although small as this is a small amount spent in comparative terms)



AD/AS diagram indicating a shift out in AS in the long run due to a % of the spending being allocated towards improved efficiency in green businesses and technology



Or micro subsidies diagram



AO3

Micro (limited AO3): decreased external costs and improved environment.

Macro:

GDP may rise as spending on government subsidies is part of G is part of AD.

The increase in G is an injection in the circular flow of income and may lead to a small multiplier effect, further increasing AD and GDP.

Unemployment may fall due to new green businesses starting which require labour resources.

New businesses could increase competition in existing markets, forcing businesses to improve their efficiency to be more competitive.

New environmentally friendly businesses may encourage existing firms to become more environmentally friendly and improve the sustainable economic growth (GDP).

Due to subsidies encouraging investment in more efficient technology this may lead to higher productivity as the quality of resources are increased, leading to greater potential growth/gdp.

New environmentally friendly technology could lead to firms benefiting from lower average unit cost (after the initial investment cost), helping the economy counter inflation pressures but also allowing UK businesses to be more competitive in world markets improving the trade deficit.

Government subsidies could help the UK become a world leader in green technology.

AO4

However government subsidies will be an expense for the government and so will increase government spending, potentially worsening the budget deficit (depending on if tax revenues increase at more/lesser rate) and government debt as a % of GDP (depending on if there are no other cuts in spending).

Subsidies for new businesses and new technology may not have as greater impact as planned. New businesses have a high chance of failure and innovation in new technology may not be successful.

The end impact on GDP depends on the power of the multiplier.

The end impact on UK exports and imports may depend on the grow of the environmentally friendly industries overseas. China and USA are major economies that are less active in terms of sustainability, these are major potential economies for UK exports.

It is likely to be beneficial, especially in a world now becoming increasingly aware of climate change.

2. (c)	Using the data, consider the extent to which information asymmetry existed between producers and consumers of personal care products containing microbeads before the 2018 ban. [6]		
Band	AO1	AO2	AO4
	2 marks	2 marks	2 marks
	<i>Is information asymmetry understood?</i>	<i>Is the answer in context?</i>	<i>Is the answer debated and judged?</i>
2	<p>2 marks</p> <p>Good understanding</p> <p>Good understanding of information asymmetry and their causes</p>	<p>2 marks</p> <p>Good application</p> <p>The data is used effectively to support argument(s) on the information asymmetry that exists between consumers and producers of personal care products</p> <p>Case is used to support both the producer and consumer side.</p>	<p>2 marks</p> <p>Good evaluation</p> <p>A reasoned judgement as to the extent to which an information asymmetry exists</p> <p>Counter argument(s) are present and well developed</p>
1	<p>1 mark</p> <p>Limited understanding</p> <p>Partial understanding of information asymmetry and their causes</p>	<p>1 mark</p> <p>Limited application</p> <p>Data is used, but its use is underdeveloped, taking the form of occasional references rather than forming strong supporting evidence</p> <p>Case is used to support either the producer and consumer side.</p>	<p>1 mark</p> <p>Limited evaluation</p> <p>Counterarguments are present, but none of them are developed or they are developed but lacks an overall judgement the question.</p> <p>Two sided answers without an overall judgement or have a judgement that is unsupported will be in this band</p>
0	<p>0 marks</p> <p>No valid understanding</p>	<p>0 marks</p> <p>No valid application</p>	<p>0 marks</p> <p>No valid evaluation</p>

Indicative content:

AO1

Information failure is a type of market failure where individuals or firms have a lack of information about economic decisions.

Information asymmetry: exists when either the buyer or seller does not have access to the same amount of information. When one party has more information than another. Producers can be aware due to inside/internal information whilst consumers less so as they do not have access to the internal information of how a business operates.

Lack of education/awareness. Demerit goods have degrees of information failure with consumers unaware of the true personal cost/benefit but the producers are and so purchase the personal care products without realising that micro beads are plastic.

Difficulty in estimating costs and benefits. It is often difficult to be aware of social costs of goods. Accounting costs are relatively easy to know. But, when it comes to knowing more intangible external costs, it becomes difficult to. Although producers might have more awareness of this compared to consumers.

Failure to disclose information. In many economic transactions, sellers may not make full disclosure so that buyers are unaware of the true contents of the good. The designers of the personal care products avoid using microbeads labelling at the front of the product, instead labelling the product at the rear and in small print which consumers are less likely to view. Consumers have less information than the producers.

Misinformation. The producers of personal care products label the microbeads using their official chemical names so that consumers do not realise that these goods contain plastic microbeads. Consumers have less information than the producers.

AO2

Microbeads are made from synthetic polymers such as polystyrene.

These are included in the ingredients stated on the packaging, normally in small labelling on the back of the product.

The USA banned microbeads raising awareness of the problem in the UK.

Online websites started listing products with microbeads.

The media raised further awareness.

AO4

But increased awareness from 2015 when they were banned in the USA (not UK) raised their awareness, closing the gap of information asymmetry.

The internet has played an important part in decreasing asymmetric information.

Increased awareness of plastic pollution would have increased awareness in the media.

Website could have been created with lists of the products with micro-beads which worried consumers could consult.

The label on the back of the product does indicate that micro-beads are present.

2. (d) (i)	Using the data, calculate the percentage change in plastic bag usage between 2014 and 2019. [2]
	<p>AO2: 2 marks</p> <p>Award 2 marks for correct identification of data and correct % change calculation. Expressed as a -ve</p> <p style="text-align: center;">92.85%</p> <p>Award 1 mark for showing the correct working for % change but not shown as a -ve % or correct process but data applied incorrectly</p> <p style="text-align: center;">$130/140 \times 100$</p>

2. (d) (ii)	Using the data and your answer to d (i), discuss the nature and strength of the relationship between shopping and the demand for plastic bags. [6]	
Band	AO2	AO4
	2 marks	4 marks
	<i>Is the answer in context?</i>	<i>Is the answer debated and judged?</i>
3		<p style="text-align: center;">4 marks</p> <p>Excellent evaluation</p> <p>A reasoned judgement on the strength of the relationship between shopping and the demand for plastic bags</p> <p>The evaluation is clearly set in the context</p>
2	<p style="text-align: center;">2 marks</p> <p>Good application</p> <p>The data is used effectively to support their point</p>	<p style="text-align: center;">2 -3 marks</p> <p>Good evaluation</p> <p>A reasoned judgement on the strength of the relationship between shopping and the demand for plastic bags</p> <p>Counter argument(s) are present and developed</p>
1	<p style="text-align: center;">1 mark</p> <p>Limited application</p> <p>The data is used, but its use is underdeveloped, taking the form of occasional references rather than forming strong supporting evidence</p>	<p style="text-align: center;">1 mark</p> <p>Limited evaluation</p> <p>Counterpoints are present, but none of them are developed.</p> <p>Judgement (s) that is/are unsupported will be in this band</p> <p>or a supported one-sided judgment</p>
0	<p style="text-align: center;">0 marks</p> <p>No valid application</p>	<p style="text-align: center;">0 marks</p> <p>No valid evaluation</p>

Indicative content:

OFR

AO2

Strong In 2014/15 before the ban there would have been a strong relationship as 140 bags were used per person compared with 10 in 2017/18.

Supermarket shopping – you would expect consumers to have strong joint demand between shopping and bags as supermarket shopping requires transport home.

A drop of 92.85% is a very significant decrease indicating a lower strength than previously

AO4

But a drop of 92.85% suggests the strength of the relationship has fallen greatly – maybe due to the nudge of the charge.

Possibly the increases awareness due to the charge being promoted, increased customer awareness and guilt.

The use of bags for life suggests there is still a strong relationship but it is just that customers now have a reusable bag than take single-use plastic bags every time they shop.

However, it could depend on the type of shopping – convenience shopping is less planned and so customer may forget to take a bag, so may decide to still buy bags compared to supermarket shopping that is planned which allows the customer to pack bags in advance.

2. (e) (i)	Using the data, outline how plastic fragments can create external costs. [4]	
Band	AO1	AO2
	2 marks	2 marks
	<i>Is understanding clear?</i>	<i>Is the answer in context?</i>
2	2 marks Good understanding Clear understanding of external costs	2 marks Good application Good use of the data to support how plastic fragments create external costs
	1 mark Limited understanding Weaker understanding of external costs	1 mark Limited application Limited use of the case to support how plastic fragments create external costs.
0	0 marks No valid understanding	0 marks No valid application

Indicative content:

AO1

Shows an understanding of an external cost

An external cost occurs when producing or consuming a good or service imposes a cost upon a third party not involved in the production or consumption of that good.

If there are external costs in consuming a good (negative externalities), the social cost will be greater than the private cost

AO2

The external cost can be in the form of physical, non-physical harm or financial penalty on a 3rd party.

Potential for micro-plastic fragment pollution in edible tissues of commercial fish which can then enter the food chain.

Micro-beads washed through the water system out to sea with potential to result in increased plastic in the edible tissues of commercial fish and enter the food chain.

Danger of sea birds and larger marine creatures like turtles, dolphins and seals, becoming entangled in plastic bags and other debris. Thus, causing death and less biodiversity.

Sea-life may mistake plastic for food. Plastic bags, once consumed, cause internal blockages and usually result in death. Larger pieces of plastic can also damage the digestive systems of sea birds and whales, and can be potentially fatal leading to less biodiversity.

Plastic in the food chain can then be consumed by humans. Although no long-term evidence of any health effects as yet, there is potential for long term health impacts causing a cost to either the individual that did not consume the initial plastic directly or to the government.

A lack of biodiversity may have long term impacts on the choice of diets for a 3rd party.

Impact on biodiversity may require 3rd parties such as zoo's to take more protective actions, increasing costs.

2. (e) (ii)	To what extent are the steps taken by the UK Government to reduce plastic pollution likely to solve the market failure? [10]		
Band	AO2	AO3	AO4
	2 marks	4 marks	4 marks
	<i>Is the answer in context?</i>	<i>Are the impacts of the steps taken to solve the problem explained?</i>	<i>Is the answer debated and judged?</i>
3		<p>4 marks Excellent analysis</p> <p>Detailed lines of analysis explaining how two actions taken by the UK govt to decrease global plastic pollution are likely to solve the market failure</p> <p>All stages in the process are fully explained</p>	<p>4 marks Excellent evaluation</p> <p>Comes to a reasoned judgement as to the extent that the steps taken by the UK govt to decrease global plastic pollution are likely to solve the market failure</p> <p>The evaluation is clearly set in the context</p>
2	<p>2 marks Good application</p> <p>The data is used effectively to support the argument in the analysis</p>	<p>2-3 marks Good analysis</p> <p>Developed lines of analysis explaining how two actions taken by UK govt decrease global plastic pollution are likely to solve the market failure</p> <p>Some stages in the process are not fully explained</p> <p>or one action with detailed explanation</p>	<p>2-3 marks Good evaluation</p> <p>Counter arguments are present and developed</p> <p>Judgement(s) as to the extent to which the steps taken by the UK govt to decrease global plastic pollution are likely to solve the market failure</p> <p>Answer may have brief end judgment</p>
1	<p>1 mark Limited application</p> <p>The data is used, but its use is underdeveloped, taking the form of occasional references rather than forming strong supporting evidence</p>	<p>1 mark Limited analysis</p> <p>There is a limited chain of reasoning, but its use of economic theory is underdeveloped; explanations are superficial</p>	<p>1 mark Limited evaluation</p> <p>Counterpoints are present, but none of them are developed.</p> <p>Judgement (s) that is/are unsupported will be in this band</p> <p>or a supported one-sided judgment</p>
0	<p>0 marks No valid application</p>	<p>0 marks No valid analysis</p>	<p>0 marks No valid evaluation</p>

Indicative content:

AO2

UK government actions; the government subsidies for greener processes. the plastic bag tax, the banning of microbeads, tax on plastic packaging.

Use of the data to suggest although the government subsidies are in the millions, in the context of government spending the amount proposed is very small.

Use of the data to appreciate that the actions taken are only on a relatively small % of plastic pollution sources

Use of the data to appreciate that the UK is one country of a relatively large number of polluters that pollute at a greater rate than the UK

AO3/AO4

Understanding the market failure is the overconsumption or overproduction of plastic. A diagram may be used but is not necessary.

The market failure creates externalities and external costs as the social costs are greater than social benefits, creating welfare loss.

The plastic bag tax has encouraged a decrease in the overuse of plastic bag and so decreasing the number of waste plastic bags thrown away and potentially into the sea.

But there are still a large number of plastic bags in circulation.

The banning of micro-beads should lead to firms using more environmentally friendly ingredients, leading to less plastic in the production process and output nearer the socially optimum level

But firms may switch to different types of products for micro beads or a different definition of plastic not covered by the government ban.

Other government initiatives such as the government grants could encourage different types of plastic and more recycling but this does not solve the large issue of consumption

The tax on the manufacture and import of plastic packaging which contains less than 30% recycled plastic could lead to higher costs for businesses and so higher prices for customers and lower demand nearer to the socially optimum level but this depends on PED – it may be that firms pass on the higher prices to consumers lowering consumer surplus and not leading to a great decrease in demand

Eliminating unnecessary plastic in schools by replacing items such as plastic straws, bottles and food packaging with sustainable alternatives by 2022. By encouraging the lower demand for plastic it could decrease the demand to nearer to the socially optimum level but schools only make up a small % of the total demand - although education of those at school may have longer term impacts.

Other AO4

The steps the UK govt has taken is only on a small % of plastic items produced. There is still a large amount of single-use plastic used for food packaging for example.

The steps taken in the UK may help lower the use of some of the plastic use in the UK but in terms of global use of plastic it is insignificant.

The data shows that in terms of global plastic pollution the UK is one producer out of large number of countries – China, India, USA and South America appear to be large producers and without steps to limit plastic pollution in these countries then steps the UK govt takes are likely to only lead to a small impact globally.