PEARSON EDEXCEL IAL ECONOMICS · YEC11

ECONOMICS



MARK SCHEME

UNIT 2: ECONOMIC GROWTH

SCORE	PERCENTAGE
/287	%

STEMUP

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Mark Scheme

Q1.

Question	Quantitative skills assessed	Answer	Mark
	QS2: Calculate, use and understand percentages, percentage changes and percentage point changes **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** ***A*** *is not correct as the positive output gap decreased between 2017 and 2018* ***C*** *is not correct as there is a negative output gap in 2019 and positive output gap in 2017* ***D*** *is not correct as the negative output gap increased between 2018 and 2019*	**(1)**

Q2.

Question	Quantitative skills assessed	Answer	Mark
	-	B	**(1)**

Q3.

Question	Evaluate whether the costs of economic growth outweigh the benefits.
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** • Understanding of economic growth • High rate of economic growth in Ethiopia has been accompanied by a high rate of deforestation The costs of economic growth include: • Environmental costs: ○ deforestation has made climate change worse and caused soil erosion ○ increased use of non-renewable resources, including fossil fuels ○ climate impacts from the burning of fossil fuels • Inflation – increases in AD as consumption, investment, government spending and possibly exports increase, will increase demand-pull inflationary pressures in the economy, leading to a range of possible issues. • Opportunity costs – production of consumer goods may need to be sacrificed in the short term so that capital goods can be produced. This may lead to lower living standards in the short term. • Balance of trade deficits: ○ as average incomes rise, consumers are likely to respond by buying more imported goods, worsening the country's trade balance ○ increased production of goods and services may require more raw materials and components to be imported, worsening the country's trade balance • Increased inequality as the returns to economic growth are unequally distributed, with those who already own more factors of production receiving a greater increase in income • Lower living standards, for e.g. related to environmental costs such as pollution, congestion, over-development **NB Candidates may use costs of growth as analysis and the benefits of growth as evaluation, or they may analyse both costs and benefits, and then evaluate the significance of the points made.** **NB Award a maximum of Level 3 for answers with no application.**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

Evaluation (8 marks) – indicative content

Significance of costs of growth:

- It depends if it is actual or potential economic growth
- Increased government tax revenues may not translate to improved public services: the government may have to pay off debt, have other priorities, or suffer from corruption
- Discussion of how sustainable the economic growth is, e.g. to what extent are non-renewable resources being used; or is it the manufacturing or services sector of the economy which are growing most
- Trade balance may not worsen if it is export-led growth
- Effects on income inequality depend on government fiscal policy responses also
- Effects on inflation depend on:
    - the original level of spare capacity in the economy (possible discussion of Keynesian vs. classical LRAS curves)
    - the extent to which the growth leads to higher levels of investment
    - the government/central bank's monetary policy response
- Short-run vs. long-run effects, e.g. changes in Ethiopia were over a 14-year period
- The answer may be different for different countries and at different times
- It depends on the level/speed of economic growth, e.g. economic growths of over 10% for 14-year period are relatively extreme

	The benefits of economic growth: • Higher average incomes leading to higher living standards as consumers can buy goods and services, or afford to send their children to school, as in Ethiopia • A higher value of goods and services being produced, which are available for consumption • Lower unemployment rates meaning that: ○ the country is utilising its resources more efficiently, moving closer to its PPF and closing the negative output gap ○ higher average incomes leading to higher living standards, as in Ethiopia ○ social benefits such as lower crime rates and better health ○ lower levels of government spending are required on means-tested/unemployment benefits, improving the government's budget balance or allowing this money to be allocated elsewhere, e.g. improving access to clean water, as in Ethiopia ○ less loss of skills/workers becoming inactive due to long term unemployment • Increased sales/revenues/profits for firms meaning that they may: ○ expand and take on more workers, further reducing the rate of unemployment ○ undertake more investment, boosting AD and LRAS, leading to non-inflationary economic growth in the future ○ pay more tax on profits to the government • Higher levels of investment, leading to: ○ more jobs being created ○ better quality products being produced ○ increased AD and LRAS, meaning non-inflationary economic growth in the future • Increased tax revenues from a wide range of taxes, leading to an improved government budget position, or increased government spending, e.g. improved access to clean water in Ethiopia • Improved public services financed by the increased tax revenue, for example education or healthcare

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	0	No rewardable material.
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Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q4.

Question	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** ***A*** *is not correct as it is most likely that there will be an increase in profits for firms* ***B*** *is not correct as it is most likely that there will be an increase in the rate of inflation* ***D*** *is not correct as it is most likely that there will be an increase in government tax revenues*	**(1)**

Q5.

Question	Evaluate the likely effects of a recession. Refer to a country of your choice in your answer.
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** Understanding of recession: negative economic growth for two or more consecutive/successive quarters or six months Negative effects include: • Consumers will receive lower average incomes and they will not be able to afford more goods and services nor increase their standard of living; consumers may find it more difficult to meet basic needs; a decrease in subjective happiness • With lower real GDP, firms employ significantly fewer workers creating unemployment; wages fall and create greater inequality • Firms are likely to make lower profits as consumer spending falls; less profit implies lower future investment into R&D/innovation; firms delay spending on capital or technological advancements • Reduction in government tax revenues and higher government spending on unemployment/welfare benefits; deterioration of public finances • With lower GDP, fewer resources can be devoted to promoting the use of renewable resources • High social dislocation/crime/civil unrest/stress issues/high divorce rates; worsens health; lower life expectancy • May result in a fall in house prices leading to negative wealth effects **NB Candidates may use negative effects as KAA and positive effects as evaluation (or vice versa)** **NB Award a maximum of Level 3 for answers with no reference to a country in their answer**

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	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (8 marks) – indicative content Positive effects include: • The lower aggregate demand may reduce both demand-pull and cost-push inflationary pressures • Lower external costs of production due to less output produced by firms; less exploitation of finite resources and less depletion of non-renewable resources • Lower spending on imports would cause an improvement in the current account position of the BOP • Reduction in inequality: those with assets may have a proportionally smaller increase in the market value of their income on their wealth • Lower house prices may make houses more affordable *Other evaluative comments:* • The size and length of the recession is important in terms of the effect, e.g. As Germany had a relatively small contraction, it may have limited impact on the economy

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	0	No rewardable material.
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Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q6.

Question Number	Answer	Mark
	Knowledge 1, Application 3 **Quantitative skills assessed:** **QS1:** Calculate, use and understand ratios and fractions. **QS9:** Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for correct definition/formula/implicit understanding, e.g.: • GDP per capita is a measure of a country's economic output that accounts for its number of people **(1)** • GDP ÷ population **(1)**	

	Application Up to 3 marks for use of the data in calculation from the following, e.g.: $2597.5 billion /1.2836 billion = $2023.60 **(1)** $2023.61 - $1506.20 **(1)** = $517.41 **(1)** **NB: if correct answer ($517.41) is given, award full marks regardless of working** **NB: accept answers to any sensible number of decimal places, e.g.:** • **$517 (0 d.p.)** • **$517.4 (1 d.p.)** • **$517.41 OR $517.42 (2 d.p.)** **NB: if candidate calculates percentage change correctly (34.4%) but does not state the change in money terms, award a maximum of 3 marks.**	**(4)**

Q7.

Question	Between 2012 and 2022 the productivity rate in Turkey increased by 39.2%. Evaluate the likely benefits of an increase in the productivity rate. Refer to an economy of your choice in your answer.

Indicative content guidance

Answers must be credited by using the level descriptors (below) in line with the general marking guidance.

The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited.

Knowledge, Application and Analysis (12 marks) – indicative content

- Understanding of productivity: measures the efficiency of production.
- It is usually measured as output per worker/output per hour worked

- Increased productivity rate increases the productive potential of the economy, increasing LRAS and resulting in a rise in real output causing economic growth and a reduction in unemployment (may be shown diagrammatically)
- An increase in LRAS could result in a decrease in the price level/lower inflationary pressures (may be shown diagrammatically)
- Higher productivity rates may increase demand for exports. As export prices fall/the value of exports increases: improves the current account of the balance of payments/ balance of trade
- Increased productivity rate can result in a greater incentive for businesses to invest: this leads to greater injections into the circular flow of income
- A highly productive workforce may increase the demand for labour and real wages, increasing consumption and AD: hence real output (may be shown diagrammatically)
- Higher productivity rate is likely to reduce unit costs and therefore increase company profits: this could result in an increase in investment and/or increase in wages of the workforce
- Higher productivity rate is likely to increase tax revenue: this can lead to more government spending and potential multiplier effects on GDP

NB Award a maximum of Level 3 for answers with no reference to an economy in their answer

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context.

		A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.
	Evaluation (8 marks) – indicative content • May conflict with government's environment objectives • Higher productivity may be the result of capital investment that may reduce employment of labour / structural unemployment • Workers may need to be retrained to move to a different sector • Magnitude of productivity rate improvement • Depends on relative productivity rates • Difficulty in measuring productivity rates e.g. especially service sector • Increased productivity may only occur in the long-run, so unlikely to have an immediate impact on real output • Other factors might be more significant for economic growth e.g. high consumption through demand-side policies • Impact on inflation on the shape of/elasticity of LRAS and position of AD • Current account of the balance of payments is also influenced by other factors e.g. exchange rate • Investment by businesses may be based more on confidence than productivity	
Level	Mark	Descriptor
	0	No rewardable material.
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Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q8.

Question	Explain **one** likely impact of a negative output gap on Brazil's economy.	Mark
	Knowledge 1, Analysis 2, Application 1 **Quantitative Skill assessed** **QS2**: Calculate, use and understand percentages, percentage changes and percentage point changes **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms **Knowledge and Analysis** 1 knowledge mark for understanding of a negative output gap, e.g.: when actual GDP is less than potential GDP (this may be shown via an accurately drawn/labelled diagram) *OR* 1 knowledge mark for identification of one characteristic of a negative output gap **(1)** Up to 2 analysis marks for development of the identified impact, e.g.: - The government is likely to have a budget deficit **(1)** as government spending on means-tested/unemployment benefits is high **(1)** and tax revenue, e.g. income tax, is relatively low **(1)** - There is likely to be unemployment **(1)** as some of the labour factor of production is unemployed **(1)** leading to spare capacity **(1)** - Low inflation/disinflation/deflation **(1)** as there is low cost-push inflationary pressure **(1)** because high levels of spare labour reduce wage rates **(1)** - Low inflation/disinflation/deflation **(1)** as there is less demand-pull inflationary pressure **(1)** because AD is relatively low **(1)** **Application** 1 mark for appropriate reference to Brazil or another economy, e.g.: - The size of Brazil's negative output gap was 5.6% of its GDP in Q1 2019 **(1)**	**(4)**

Q9.

Question	Evaluate the costs of economic growth. Refer to a country of your choice in your answer.
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** • Understanding of economic growth

	Costs include: • Environmental costs: ○ increased use of non-renewable resources/the overconsumption of natural resources, has led to an increase in pollution from the burning of fossil fuels ○ deforestation has made climate change worse and has caused soil erosion/biodiversity loss, thereby creating greater external costs • Inflation rising as full capacity is approached – bottlenecks may arise where some restrictions in the supply chain cause an increase in cost and wage pressures • More unequal distribution of income and wealth as the rich tend to get richer relative to the poor/increased inequality as returns to economic growth are unequally distributed, with those who already own more factors of production receiving a greater increase in income • Balance of trade deficits: ○ as average incomes rise, consumers are likely to respond by buying more imported goods, worsening the country's trade balance ○ increased production of goods and services may require more raw materials and components to be imported, worsening the country's trade balance • Decrease in national happiness and wellbeing if economic growth results in longer working hours and increased stress • Decrease in living standards and quality of life if economic growth is associated with increased congestion, loss of countryside etc. **NB Award a maximum of Level 3 for answers with no reference to a country in their answer**

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	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
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Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

Evaluation (8 marks) – indicative content

Benefits of economic growth include:

- more employment opportunities/lower unemployment
- increased tax revenues for the government which may be used to improve public services or redistribute incomes
- higher profits for companies which may be used to improve the quality products or to produce new innovative products
- consumers can afford to buy more goods and services and/or have more leisure time
- National happiness may increase because people have higher real incomes and can afford more goods and services
- Living standards and quality of life may increase e.g. because of improved housing conditions, better education and health

- Environment costs may not arise:
  - if the country already uses renewable resources in some industries
  - if firms invest their profits in clean and green technology leading to more sustainable growth
  - depends on the extent of the effectiveness of the governments' environmental policies

- Inflation may not arise:
  - if economic growth is due to increase in the productive potential of the economy/rightward shift of the LRAS
  - proximity to full employment level of output; if spare capacity exists and AD shift continues to be on elastic segment of LRAS
  - depends on extent to which the domestic economy's capacity/ supply can meet the rising demand
- Trade deficit may not worsen if economic growth is:
  - as a result of increase in exports (export-led)
  - generated through an increase in productivity (for e.g., through investment in capital/technology), which would increase exports

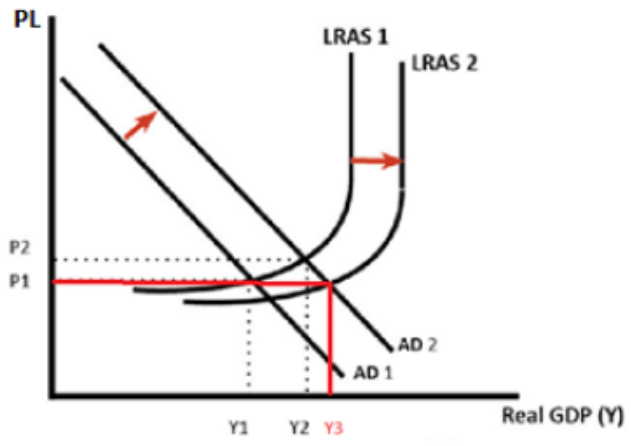
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Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q10.

Question	With reference to this information, explain **one** cost of economic growth.	Mark
	Knowledge 1, Analysis 2, Application 1 **Quantitative skills assessed:** **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge and Analysis** 1 knowledge mark for identification of one cost and up to 2 marks for linked analysis: • Inflationary pressure **(1)** if economic growth is caused by increases in consumption/AD **(1)** as consumers may have higher incomes **(1)** • More air pollution **(1)** as factories will produce a higher level of emissions or toxic waste/use more non-renewable energy resources **(1)** reducing living standards **(1)** • More environmental degradation **(1)** as there is a greater demand for resources **(1)** and therefore more output being produced/greater total output **(1)** • The balance of trade may worsen **(1)** as the economy grows the demand for imports rises; **(1)** this leads to the value of imports rising **(1)** • Increased inequality **(1)** as those with higher incomes benefit more from economic growth as they own resources **(1)** and lower income households benefit less as they are on fixed contracts/incomes **(1)** **Application** 1 mark for appropriate use of the information, e.g.: • In 2022 Guyana's rate of economic growth was the highest in the world / Its annual percentage increase in real GDP was 62.3% **(1)**	**(4)**

Q11.

Question	Evaluate the costs of rapid economic growth on an economy of your choice. **Indicative content**
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** Award maximum of Level 3 (9 marks) if candidate does not refer to a country/context in their answer • Understanding of rapid economic growth • Economic growth is an increase in the productive capacity of the economy • The growth today could deplete natural resources reducing possible production in future • Pollution may affect health/living standards/wellbeing/productivity • Rapid actual economic growth may cause high inflationary pressure, which is detrimental to those on a fixed income/reduces the value of savings/stop future investment/menu costs • Real incomes may not rise if inflation is high • If demand for imports increases, growth might cause a balance of trade deficit • Inequality may increase if the gains from economic growth mainly benefit the owners of resources • Rapid economic growth may negative impact the current account on the balance of payments as import rise and exports fall Reward diagrams showing change in AD and LRAS

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	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (8 marks) – indicative content
	• Rapid economic growth leads to higher employment reducing the level of cyclical unemployment • As wages rise standards of living also increase • As incomes rise, the government receives more tax revenue reducing the fiscal deficit • Reduced need for benefit payments • Firms profits will increase leading to further investment and an increase in the LRAS • Government may use higher tax receipts to increase public spending, reducing inequality and improving standards of living • Inflationary pressure may reduce following improvements in LRAS • Difficulty in defining 'rapid' • Economic growth can lead to an increase in resources available to deal with pollution • Difficulty in measuring pollution and how much of it is contributed by growth • Difficulty in quantifying the economic impacts of pollution linked to rapid growth • Impact of rapid growth may only be experienced in the long-term

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Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q12.

Question Number	Answer	Mark
	Knowledge 2 Up to 2 marks for offering a definition of real wage growth e.g.: • The increase/change in wages **(1)** • Adjusted for inflation **(1)**	**(2)**

Q13.

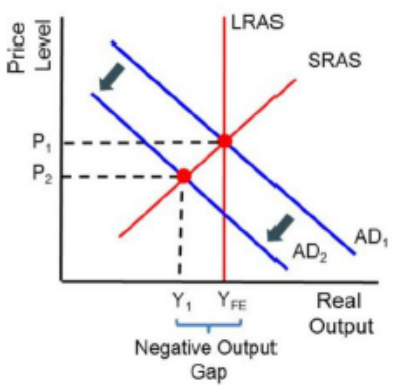
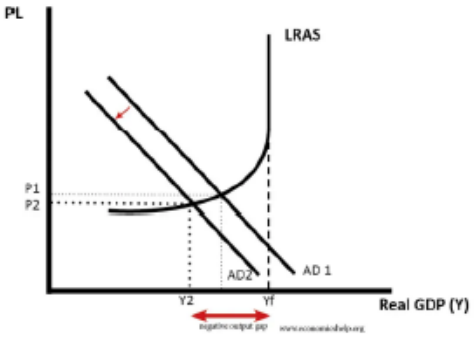
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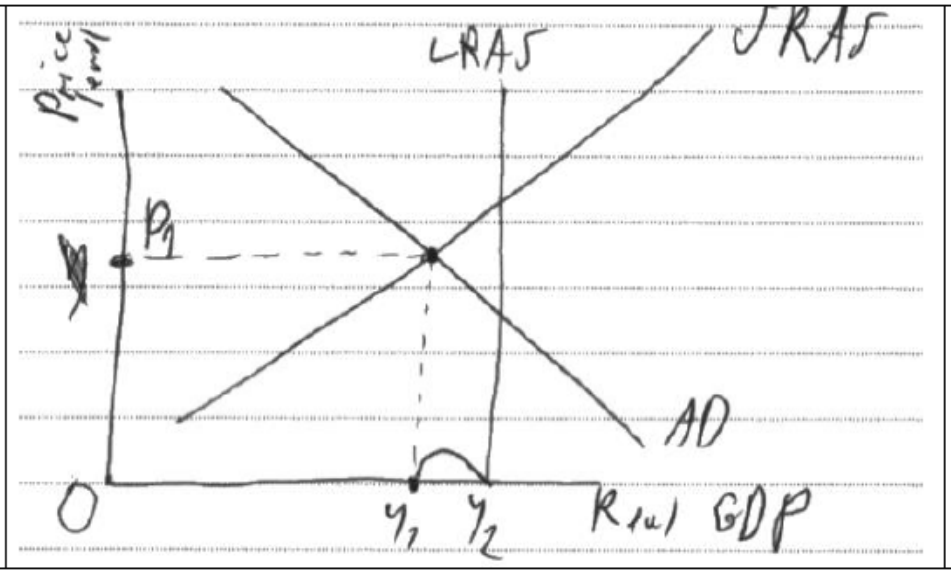
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Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 3	7–8	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (6 marks) – indicative content • The Chinese economy has been slowing down, reducing demand for exports and tourism • In turn, this caused a fall in business confidence which could result in a fall in investment • The fall in house prices causes a negative wealth effect, reducing consumption • Real wages didn't grow until 2018, reducing the level of potential consumption • Government expenditure on infrastructure will have a positive effect in the long run, but may cause disruption in the short run • Consumption is likely to have the biggest effect on economic growth because it is the largest component of GDP • Central Bank prediction that the rate of inflation would increase in 2019 might cause a fall in real wages and in consumption

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	5–6	Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q14.

Question	As a result of the significant decrease in consumer spending in France in 2020, the country's negative output gap was 5.64%. Draw an AD and AS diagram to show the negative output gap.	Mark
	Knowledge 1, Application 3 **Quantitative skills assessed:** **QS4:** Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms   **Knowledge** Correctly drawn diagram with correctly labelled AD/AS curves (the diagram must include the LRAS curve) **(1)** **Application** Up to 3 marks for the following information included on the diagram: • For showing equilibrium price level and real output at full employment level of real output (may include leftward shift in AD curve but this is not essential) **(1)** • Equilibrium at real output lower than full employment level / New equilibrium showing lower price level and real output **(1)** (not rewarded if 'price' and 'quantity' is used on the axis) • Correct annotation of negative output gap showing distance between equilibrium and full employment level of output **(1)** (not rewarded if 'quantity' is used on axis)	**(4)**

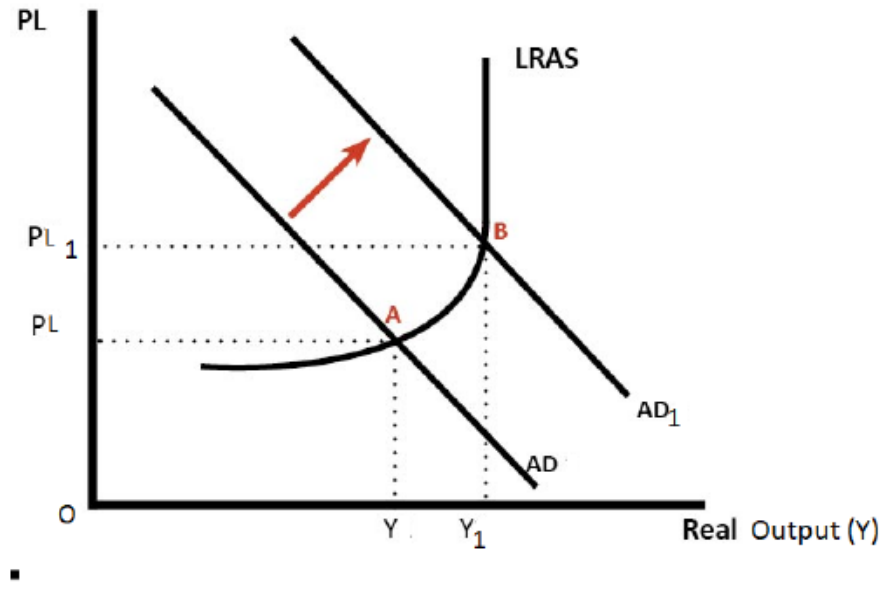


Q15.

Question Number	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** ***A*** *is not correct because potential growth is illustrated by a rightward shift in the LRAS* ***B*** *is not correct because potential growth is illustrated by a rightward shift in the LRAS* ***D*** *is not correct because potential growth is illustrated by a rightward shift in the LRAS*	**(1)**

Q16.

Question Number	In 2019 the new President of the European Central Bank asked governments of eurozone countries to cut taxation and increase government expenditure to stimulate the rate of economic growth. Evaluate fiscal policy instruments as a means of increasing the rate of economic growth. Indicative content
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. • Economic growth- increase in real GDP • Fiscal policy- use of taxation and government expenditure • Demand side policy- aimed at influencing AD • Expansionary policy- aims to increase AD • Would involve increase in government expenditure and/or decrease taxation • Increased government expenditure would lead to increased AD – as G is a component of AD • Decreased income tax would lead to more disposable income and increased consumption and increased AD • Decreased corporation tax would see firms keep more profit and encourage investment and increased AD

	Diagram 

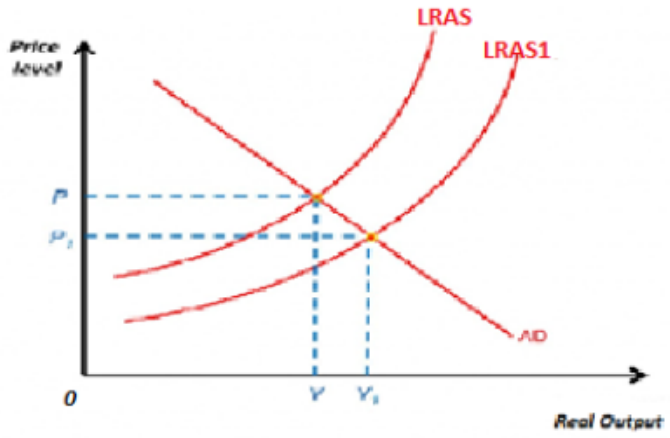
	• As can be seen the increase in AD leads to an increase in real output from Y to Y_1 • With higher real output employment would increases/unemployment decrease • If private sector investment is encouraged then further increases in economic growth could occur due to the multiplier effect (may be shown diagrammatically with further rightwards shift of AD and a shift in LRAS) **NB: Award a maximum of Level 3 (9 marks) if only one fiscal policy instrument is considered**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (8 marks) – indicative content • Fiscal policy may lead to an increase in average price level increasing from P to P_1-inflationary pressure • May create a fiscal deficit- adding to repayments in future • Many adjustments to tax and government expenditure may have effects on the supply-side • Supply-side policy may be more effective as does not come with the trade-off with inflationary pressure • Monetary policy may be more effective – and is the primary responsibility of ECB, rather than advising national governments in areas which are not its responsibility • The shape of the LRAS curve is important- if it is classical in shape the increase in AD will just cause inflationary pressure with no economic growth in the long run • Depends on the position of AD on a Keynesian AS curve- on the horizontal section economic growth will be higher and on the vertical section will cause more inflationary pressure • People may substitute from work to leisure as their disposable income increases • Government spending generates an opportunity cost- money might be better spent elsewhere • Coordination issues across the member states • Magnitude- depends on the size of reduction in taxation/ increase in government spending • Time lag- may take time for tax cuts to take effect and for consumers to realise their disposable income is now higher • Time lag – government expenditure can be slow due to delays in setting contracts etc • If there is an increase in government expenditure on investment then there will be an increase in LRAS as well as in AD • Impacts on potential growth as fiscal policy may boost LRAS dependent on what government spends money on or where they reduce taxation

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q17.

Question Number	Indicative content
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** Award maximum of Level 3 (9 marks) if candidate does include application in their answer • Interventionist supply-side policies are policies which involve increased government intervention in the economy, in order to increase LRAS/the productive potential of the economy • Increasing government spending on infrastructure may increase the productive potential of the economy • Increasing government spending on education/training/skills increases the skill level of the labour force, increasing productivity • Offering finance for business start-ups encourages more firms to enter the market, increasing competition and LRAS • Lowering corporation tax/offering subsidies increases the incentive for businesses to invest, improving productivity, and increasing LRAS • Regional policy encourages investment into all areas of the economy, encouraging more productivity and growth Reward diagrams showing an outward shift in LRAS and increase in real GDP:
	

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (8 marks) – indicative content • Businesses may only respond to changes if confidence is high, in times of recession this may be ineffective • It takes time for the economy to benefit from increased spending on education/training/infrastructure • Difference policies may be more or less effective in different countries and at different times • Growth may be harmed in the longer term if governments have to borrow to finance interventionist policies • Free market supply-side polices/demand-side policies may be more effective means of achieving economic growth

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q18.

Question	Evaluate the likely costs of a recession on an economy of your choice.
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** • Understanding of recession: negative economic growth for two or more consecutive/successive quarters or six months Costs include: • Consumers will receive lower average incomes and they will not be able to afford more goods/services nor increase their standard of living; poverty rates could potentially rise • With lower real GDP, firms employ fewer workers creating unemployment; wages fall and create greater inequality • Firms are likely to make lower profits as consumer spending falls; less production implies lower future investment into R&D/innovation • Reduction in government tax revenues and higher government spending on unemployment and welfare benefits; leading to a deterioration of public finances • With lower GDP, fewer resources can be devoted to promoting the use of renewable resources • High social dislocation/crime/civil unrest/stress issues/high divorce rates; worsens health; lower life expectancy • Can result in depressed house prices leading to negative wealth effects **NB Award a maximum of Level 3 for answers with no reference to a country in their answer**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

Evaluation (8 marks) – indicative content

Benefits include:

- Lower demand may reduce both demand-pull and cost-push inflationary pressures; the central bank may decide to lower interest rates to control the rising rate of inflation
- Lower external costs of production due to less output produced by firms; less exploitation of finite resources and less depletion of non-renewable resources of energy
- Lower spending on imports would cause an improvement in the current account position of the BOP
- Lower inequality: those with assets may witness a proportionally smaller increase in the market value of their income on their wealth
- Depressed/lower house prices may make houses more affordable to non-homeowners

Other evaluative comments:

- The size and length of the recession is important in terms of the impact, e.g. a very small contraction may have limited impact on the economy
- Recession may not occur in 2023 as these are projections by economists

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

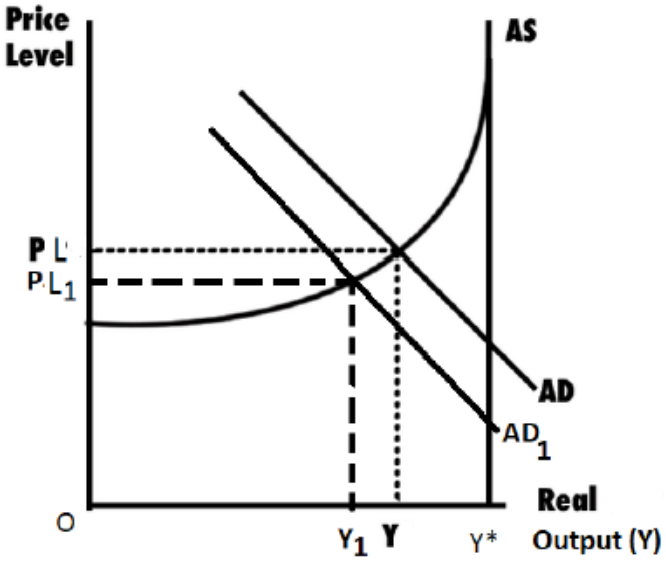
Q19.

Question Number	In quarter 1 2019 the unemployment rate in South Africa was 27.6%. In quarter 2 it increased to 29%. An additional 455 000 workers became unemployed. Evaluate the likely impact of an increase in the unemployment rate on workers, public finances and resource utilisation. Indicative content
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited.

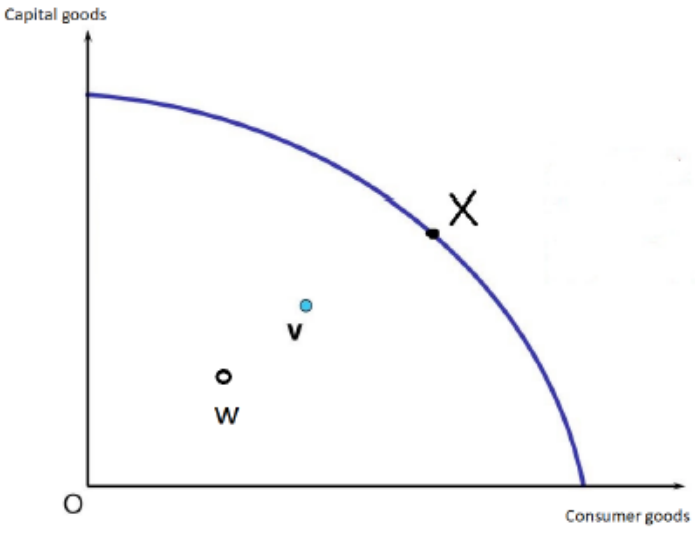
	Knowledge, Application and Analysis (12 marks) – indicative content • Unemployment- those willing and able to work but unable to find suitable employment • Unemployment has increased from 27.6% to 29%/increase of 1.4% Workers • Workers may fear losing their job and may increase savings, thus reducing consumption, aggregate demand and subsequently leading to a fall in real output and a fall in the price level • Workers may take jobs that are below their skill levels leading to underemployment • Workers who lose their jobs may spend a long time unemployed and become deskilled – they will be less employable and less attractive to employers • Workers who lose their job will see a reduction in earnings/living standards/ability to meet their basic needs • Social effects of unemployment – divorce, crime rate, health impacts • Long term effects of intergenerational unemployment Public finances • As more become unemployed they may qualify for unemployment benefits, this will cause an increase in government spending • As people move from employment to unemployment, they may move from being income taxpayers to non-income taxpayers reducing income tax revenue • Higher unemployment suggests lower output, thus lower profits for private firms and lower corporation tax revenue for government • With lower tax revenue and higher government expenditure the fiscal position will worsen. • Government may need to provide training to workers, or support to private firms - once again increasing spending and worsening fiscal position

Resource utilisation

- Resource utilisation is worse as scarce resources of labour are being wasted
- With higher unemployment the economy is going to be below full employment level of output



- The rise in unemployment will cause real output to move further away from the full employment level of real output, at Y*. Output moves from Y to Y1
- The output gap was Y*-Y and increases to Y*-Y_1
- The economy will operate further from the PPF- an original inefficient allocation of resources at point V on diagram below is exacerbated by rising unemployment and moves to point W



NB: Award a maximum of Level 3 (9 marks) if one of the three areas is not discussed – impact on workers, public finances and resource utilisation

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (8 marks) – indicative content • Unemployment may fall again in short/medium-term, reducing the effects on workers, finances and resource utilisation • Some of those unemployed may be employed in the informal sector meaning their incomes may not reduce, although impact on public finances may continue • A generous social welfare system may reduce the impact on standards of living, and may reduce other social costs • Some increase in unemployment may be due to more capital-intensive output replacing workers, so overall output may not fall, helping maintain level of AD • Government revenue from corporation tax may not fall as much as a result • May be possible to postpone or delay some government expenditure, so that fiscal deficit may be lessened • This is an additional 455 000 workers now unemployed- showing a large increase in the waste of scarce resources • Utilisation of resources may improve over time through retraining or other employment initiatives

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q20.

Question	Evaluate supply-side policies that a government could use to increase the country's productivity.
	Indicative content guidance Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make, but this does not imply that any of these must be included. Other relevant points must also be credited. **Knowledge, Application and Analysis (12 marks) – indicative content** • Supply-side policies are designed to increase productivity, competition, and incentives in an economy – it can be shown via a shift outward of the LRAS creating both actual and potential growth • Productivity is a measure of output per worker/output per unit of input/output per hour worked • Increased government spending on skills through investment in education and/or training – this would increase human capital and raise productivity • Increased government spending on infrastructure investment (e.g. roads or broadband) – this would reduce industry costs or improve access to markets • Reducing the level of welfare benefits – this would incentivise the unemployed to take jobs, work harder and increase output per worker of those in work • Privatisation - this may lead to increased competition, greater innovation resulting from higher R&D spending, and therefore higher productivity • Cutting cost of bureaucracy and/or deregulation of firms – this would raise efficiency and productivity by increasing competition between firms • Reducing regulation and/or increasing competition by reducing barriers to entry in product markets • Reducing corporation tax – this incentivises firms to innovate by investing in technological advancements and therefore increasing potential output • Reducing income tax rates – this might motivate employees to work harder/longer **NB Award a maximum of level 3 if no reference to specific country(s)**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Limited application of knowledge and understanding to economic problems in context. A narrow response or superficial, only two-stage chains of reasoning in terms of cause and/or consequence.
Level 3	7–9	Demonstrates accurate knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Analysis is clear and coherent. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 4	10–12	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using appropriate examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

	Evaluation (8 marks) – indicative content • Government will have to spend significant amount of money to increase Japan's productivity as it is much lower than that of the USA • It is difficult to accurately measure productivity • Significant time lags and implementation lags for supply-side policies • Creates an opportunity cost for the government: funds may not be spent in areas that would contribute to high productivity (asymmetric information) • Supply-side policies are less effective when there are large amounts of spare capacity in an economy: they create potential growth but no actual growth • Consideration of the effectiveness of supply-side policies such as infrastructure and education at delivering sustainable growth • Depends on the quality of education, training and infrastructure projects • Privatisation may lead to private monopolies, leading to less productivity • Cut in welfare benefits designed as an incentive to work may be ineffective if the unemployed are willing to receive lower payments and do not work • Reducing bureaucracy may create unemployment in the short-term • Reducing corporation tax rates would be ineffective if companies boost short-term profits rather than investing in productivity-boosting technology • Reducing income tax rates may create an incentive for employees to take more leisure time

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	4–6	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially developed chain of reasoning.
Level 3	7–8	Evaluation recognises different viewpoints and/or is critical of the evidence, leading to an informed judgement. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.

Q21.

Question	With reference to Figure 1 and Extract A, examine **two** reasons why Ireland's rate of economic growth was expected to decrease in 2023.	Mark
	Knowledge 2, Application 2, Analysis 2, Evaluation 2 **Quantitative Skill Assessed** **QS2:** Calculate, use and understand percentages, percentage changes and percentage point changes **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge and analysis** Up to 1 knowledge for identifying a reason and 1 analysis mark for linked development pf the reason, e.g.: • A high rate of inflation **(1K)** could create greater uncertainty in Ireland, hence reducing investment/AD **(1AN)** / A high rate of inflation **(1K)** could reduce real incomes and hence consumption/AD **(1AN)** / A high rate of inflation **(1K)** could increase export prices and hence reducing net trade/AD **(1AN)** • Rising interest rates **(1K)** increases reward for savings/cost of borrowing, hence decreases C/I/AD **(1AN)** • Weakening state of the global economy **(1K)** may reduce the demand for Ireland's exports, hence net trade/AD **(1AN)**	

	Application 1 mark for reference to Figure 1, e.g.: • In 2022 Ireland's annual real GDP growth rate was 12.2% **(1)** *AND* 1 mark for reference to Extract A, e.g.: • rate of economic growth is expected to decrease to just 4% / Forecasts also suggest that between 2024 and 2027, the economy is likely to grow by an average of 3.5% per year **(1)** **Evaluation** Up to 2 marks for evaluative comments (1+1 or 2+0), e.g.: • The size of the decrease in the rate of economic growth is large **(1)** as between 2022 and 2023, it has fallen by 8.2 percentage points / from 12.2% in 2022 to 4% in 2023 **(1)** • These are forecasts and may not happen **(1)** as inflation falls/ state of the global economy improves **(1)** • Ireland's rate of economic growth may not be low if Ireland's Government increases its spending e.g. fiscal policy **(1)** at a faster rate than other components of AD **(1)** • Economic growth may not be low in the long-run **(1)** given forecasts also suggest that between 2024 and 2027, GDP is likely to grow by an average of 3.5% per year **(1)** • It is likely to be a combination of reasons that would lead to a lower rate of economic growth for Ireland **(1)**	**(8)**

Q22.

Question	In 2022 Belize had a positive output gap of more than 7%. Explain **one** likely disadvantage of a positive output gap on the economy of Belize.	Mark
	Knowledge 1, Analysis 2, Application 1 **Quantitative skills assessed:** **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms **Knowledge and Analysis** 1 knowledge mark for understanding of a positive output gap e.g.: • when actual GDP is more than potential GDP (this may be shown via an accurately drawn/labelled diagram) *OR* 1 knowledge mark for identification of one characteristic of a positive output gap and up to 2 analysis marks for development of the identified impact, e.g.: - A higher rate of inflation **(1K)** because there is high cost-push inflationary pressure **(1AN)** as lower levels of unemployment would put an upward pressure on wage rates **(1AN)** / - A higher rate of inflation **(1K)** because there is greater demand-pull inflationary pressure **(1AN)** as AD is relatively high **(1AN)** / - Deterioration of the environment **(1K)** because there will be greater demand for goods **(1AN)** and therefore greater production by firms to meet rising demand, hence pollution **(1AN)** **Application** 1 mark for appropriate application, e.g.: - In 2022 Belize had a positive output gap of more than 7% **(1)**	**(4)**

Q23.

Question	Explain **one** likely impact of a negative output gap on Vietnam's economy.	Mark
	Knowledge 1, Analysis 2, Application 1 **Quantitative skills assessed:** **QS2**: Calculate, use and understand percentages, percentage changes and percentage point changes **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms **Knowledge** 1 mark for understanding of negative output gap, e.g.: when actual GDP is less than potential GDP (this may be shown via an accurately drawn/labelled diagram)	

	Analysis Up to 2 marks for identification and development of the impact, e.g.: - The Government is likely to have a budget deficit **(1)** as government expenditure on means-tested/unemployment benefits is high **(1)** / tax revenue, e.g. income tax, is relatively low **(1)** - There is likely to be high unemployment **(1)** because a slowdown in the economy would lead to firms making the workers redundant **(1)** / resulting in spare capacity/an inefficient allocation of resources/lower living standards **(1)** - Low inflation/disinflation/deflation **(1)** because there is low cost-push inflationary pressure **(1)** / because high levels of unemployment will put downward pressure on wage rates **(1)** / Low inflation/disinflation/deflation **(1)** because there is less demand-pull inflationary pressure **(1)** / because AD or real output/GDP is relatively low **(1)** **Application** 1 mark for appropriate application, e.g.: - The size of Vietnam's negative output gap was forecast to be between -5% and -10% in 2022 / - Award for accurately showing the figure on the negative output gap diagram **(1)**	**(4)**

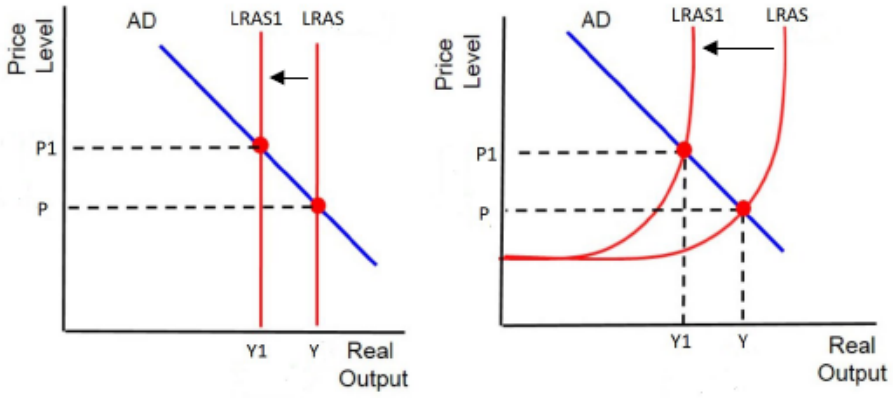
Q24.

Question Number	With reference to the overall trend of the data, explain what is meant by the term 'growth of real GDP'. Answer	Mark
	Knowledge 2, Application 2 **Quantitative skills assessed:** QS2: Calculate, use and understand percentages, percentage changes and percentage point changes QS9 Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** Up to 2 marks for defining what is meant by "growth of real GDP": • An increase in the total value of output/expenditure/ income **(1)** adjusted for inflation **(1)** **Application** 1 mark for the trend e.g. • Growth rate increases between Q1 and Q2/Q3/Q4/ between Q2 and Q3 **(1)** 1 mark for explcit use of data e.g. • In Q1 2019 real GDP did not grow **(1)** • Quoting one or more of the quarterly figures **(1)**	**(4)**

Q25.

Question	Quantitative skills assessed	Answer	Mark
		The only correct answer is B ***A*** *is not correct as profits for firms are likely to rise* ***C*** *is not correct as the government is likely to earn more tax revenue* ***D*** *is not correct as this is a benefit of growth*	**(1)**

Q26.

Question Number	Answer	Mark
	Knowledge 1, Application 3 Quantitative skills assessed: **QS4:** Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms.  **Knowledge** 1 mark for drawing original AD and LRAS curves with correctly labelled axes. **Application** Up to 3 marks for the following information on diagram: 1 mark for leftward shift in LRAS and, due to the shift in LRAS, 1 mark for new lower real output level. 1 mark for new higher price level. **NB Accept either Keynesian or Classical LRAS curves.** **NB Depending on the level of spare capacity shown on a diagram using a Keynesian LRAS curve, price level and real output level may decrease or stay the same.**	**(4)**

Q27.

Question	Ceteris paribus, calculate the final increase in the national income resulting from the LE11.9 billion investment.	Mark
	Knowledge 1, Application 3 **Quantitative Skill Assessed** **QS2:** calculate, use and understand percentages, percentage changes and percentage point changes **Knowledge** 1 mark for correct formula of multiplier **(1)** 1/(1-MPC) **OR** 1/MPW **Application** up to 3 marks for correct application MPW = 0.4 (1- 0.6) 1/0.4 = 2.5 **(1)** 2.5 x 11.9 **(1)** = LE29.75bn **(1)** **NB: If correct answer (LE29.75bn) is given, award full marks regardless of working.** **Award 3 marks if candidate misses either LE or billion.**	**(4)**

Q28.

Question	Quantitative skills assessed	Answer	Mark
		A	**(1)**

Q29.

Question Number	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms.	**The only correct answer is A** ***B*** *is not correct because welfare payments would fall when unemployment decreases* ***C*** *is not correct because demand for exports is affected by unemployment rates overseas, not in Spain* ***D*** *is not correct because we cannot tell what happened to economic inactivity rates*	**(1)**

Q30.

Question	Quantitative skills assessed	Answer	Mark
		C	**(1)**

Q31.

Question	With reference to the table, explain what is meant by an output gap.	Mark
	Knowledge 2, Application 2 **Quantitative Skills Assessed** **QS2**: Calculate, use and understand percentages, percentage changes and percentage point changes **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms **Knowledge** Up to 2 marks for defining output gap, e.g.: • Actual output *minus* **(1)** potential output **(1)** • *difference* between actual GDP/growth **(1)** and potential GDP/growth **(1)** **NB** An output gap is clearly shown **(1)** by an accurately drawn and labelled diagram **(1)** **Application** Up to 2 marks applying this to the context of Japan, e.g.: • In 2019 potential output is 0.5% and actual output is 0.27% **(1)** hence there is a negative output gap **(1)** • In 2020 potential output is 0.5% and actual output is -4.83% **(1)** hence there is a negative output gap **(1)** • Output gap of 0.23 percentage points in 2019 **(1)** and an output gap of 5.33 percentage points in 2020 **(1)**	**(4)**

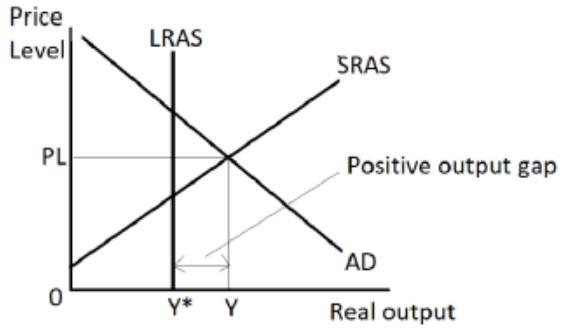
Q32.

Question	Quantitative skills assessed	Answer	Mark
	QS4: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** ***A*** *is not correct because between A to B the economy is experiencing a downturn/ negative economic growth* ***C*** *is not correct because at point C there is no output gap* ***D*** *is not correct because between C and D the economy is growing, and with greater output, unemployment is likely to be falling*	**(1)**

Q33.

Question	Quantitative skills assessed	Answer	Mark
	QS9: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** ***A*** *is not correct as house prices are likely to fall* ***B*** *is not correct as the rate of inflation is likely to fall* ***C*** *is not correct as business confidence is likely to fall*	**(1)**

Q34.

Question	Draw an AD/AS diagram to show a positive output gap.	Mark
	Knowledge 1, Application 3 **Quantitative skills assessed:** **QS4:** Construct and interpret a range of standard graphical forms **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms  **Knowledge** Correctly drawn SRAS and AD curves with correctly labelled axes **(1)** **Application** Up to 3 marks for the following information included on the diagram: • Drawing LRAS to left of short-run equilibrium **(1)** • Labelling the short-run equilibrium (Y) and full employment level of output (Y*) **(1)** • Correct labelling of the positive output gap **(1)**	**(4)**

Q35.

Question	Quantitative skills assessed	Answer	Mark
	QS4: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** ***A*** *is not correct because between Y and Z, the government's tax revenue is likely to increase* ***C*** *is not correct because between Y and Z, the rate of unemployment is likely to decrease* ***D*** *is not correct because between Y and Z, business confidence is likely to increase*	**(1)**

Q36.

Question	With reference to Figure 1, explain the term 'productivity'. **Answer**	Mark
	Knowledge 2, Application 2 **Quantitative Skill Assessed** **QS5:** Calculate and interpret index numbers **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** Up to 2 marks for defining productivity, e.g.: • Output per **(1)** unit of input/worker/hour worked **(1)** • Amount of output produced **(1)** in a given period of time **(1)** • Ratio of output volume **(1)** to input volume **(1)** • How efficiently production inputs are being used **(1)** to produce a given level of output **(1)** • How much output can be produced **(1)** from a given set of inputs/resources **(1)**	
	Application Up to 2 marks for correctly identifying trends in productivity from Figure 1, e.g.: • Between 2010 and 2020 productivity in the USA increased by around 10% **(1+1)** • Between 2010 and 2020 productivity in the UK increased from 100 to 104.5 **(1)** • In 2019/2020 the USA overtakes Germany as having the highest productivity **(1)** • Productivity improved in all the given countries **(1)** • UK productivity was the lowest amongst all countries **(1)** • Productivity rose at a faster rate in Germany than in the UK **(1)**	**(4)**

Q37.

Question Number	Answer	Mark
	Knowledge 1, Analysis 2, Application 1 Quantitative Skill assessed: **QS9:** Interpret, apply and analyse information in written, graphical and tabular forms. **Knowledge** 1 mark for understanding/definition of 'output gap', e.g. • The difference between actual output and the maximum potential output of an economy **(1)** **Or** 1 mark for identification of one possible difficulty in measuring the output gap, e.g. • It is difficult to estimate an economy's maximum potential output level as we cannot directly observe this **(1)**	

	Analysis Up to 2 marks for development of the identified difficulty, e.g.: • There may be inaccurate data on the labour force **(1)** for example difficulties in measuring the scale of labour migration /the number of people who may have left the labour market as 'discouraged workers'/the amount of under-employment in the labour market **(1)** • There may be problems in accurately measuring productivity in the economy **(1)** particularly in the service/technology sector **(1)** • Surveys of producers about the level of spare capacity may be inaccurate **(1)** for example due to misreporting, human error, time lags or survey bias **(1)** • There may be gaps in our knowledge about how much businesses are investing and the potential output from new capital **(1)** particularly in the new knowledge economy where much investment is in intangibles **(1)** • There may be difficulties in measuring real GDP **(1)** eg. due to "grey" economy, difficulties in enumerating small firms, etc **(1)**	

	Application 1 mark for appropriate use of the Figure, e.g. • The IMF consistently over-estimated the size of France's negative output gap/under-estimated the size of France's positive output gap during the period shown **(1)** • In 2007, the original estimate was a negative output gap of approximately 1.2% of potential GDP, while the final estimate was a positive output gap equal to 1.8% of potential GDP **(1)** • In 2000, the final estimate of the output gap was 2% of potential GDP higher than the original estimate **(1)**	**(4)**