

Subject: Economics

Level: 3

Standards: 91399, 91400, 91403

Part A: Commentary

It is encouraging that candidates who achieved at a higher level gave multiple reasons in their explanations, incorporated relevant definitions, and included specific graph references. Graph references needed to include specific labels or 'anchor points', for example "the price increased from P_1 to P_2 ", and be incorporated into the written explanations. Statements like "as shown by the shift in the AC curve in Graph Three" are insufficient.

Writing irrelevant material was an issue for some candidates. Questions, instructions, and resource materials need to be read thoroughly.

The examination consisted of three questions per standard and candidates were required to answer all three. The questions across all three standards required written explanations and changes made to graphs. Candidates were expected to make specific graph references in each of their written explanations.

Using a ruler would improve the accuracy of changes made to economic models.

Part B: Report on standards

91399: Demonstrate understanding of the efficiency of market equilibrium

Examination

Question One compared government intervention in the market through a subsidy on electric vehicles with an indirect tax on petrol vehicles. Students needed to use labels on the graph to identify the changes to consumer surplus (CS), producer surplus (PS), cost / gain to Government, and deadweight loss (DWL). Candidates were expected to use the information from these graphs to explain the impact of each on CS, allocative efficiency (AE), and impacts on the Government, and explain why it would be beneficial to use a combination of the two policies.

Question Two required candidates to show a shortage at the original price when a new equilibrium was established and use market forces to explain how the price might reach the new equilibrium. Candidates were expected to show a maximum price on a graph and use the data on the graph to calculate the original and new CS and PS, the change in these, and the DWL. Using the graph and table, candidates were expected to explain the impacts on CS, PS, and AE.

Question Three had graphs showing the impact of removing a tariff on the market for both elastic and inelastic goods. Candidates needed to identify the change in CS, PS, government revenue, and DWL for each graph. They were then asked to explain the impacts of removing the tariff from elastic goods on CS, PS, and government revenue. Candidates were expected to explain how removing the tariff increases AE in both elastic and inelastic goods, and to explain why this had a bigger impact on the elastic good over the inelastic good.

All three questions required the use of an economic model, either through graphing or calculation of values, and were scaffolded by breaking the question into parts. Candidates were expected to incorporate specific graph references and use appropriate economic terminology in their explanations.

Observations

It was encouraging to see many candidates referring to the data from the graph and information from the resource material in their detailed explanations in Question One. However, such referencing was not completed to the same level in subsequent questions.

A significant number of candidates did not correctly refer to the graph / table in their explanations. Good referencing uses 'anchor points', for example "price has increased from P_1 to P_2 ."

Many candidates used generalisations such as "changed" instead of increased or decreased.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- stated economic terminology instead of explaining how or why
- identified changes in consumer surplus or producer surplus with some limited references to the graph
- identified either price or quantity as a reason for the change in consumer surplus or producer surplus.

Candidates who were awarded **Not Achieved** commonly:

- did not show an understanding of allocative efficiency by linking to deadweight loss or by providing a definition
- identified a change in consumer surplus or producer surplus, but did not provide a reason for the change
- showed limited interpretation of graphs
- used some information from the graph to calculate figures but did not use the figures in their explanations.

Candidates who were awarded **Achievement with Merit** commonly:

- referred to multiple points on the graph when explaining the changes shown
- explained how equilibrium was restored and the impact on allocative efficiency in various economic models
- used correct economic terminology in their explanations and provided reasons why there was a change in consumer surplus or producer surplus
- identified an offset (gain / loss of surplus) has occurred but did not fully discuss how this happened.

Candidates who were awarded **Achievement with Excellence** commonly:

- explained fully, two reasons (price and quantity changes) for a change in consumer surplus and producer surplus, and applied the definitions accurately
- explained, using accurate economic terminology, the idea of offsetting gains against losses in terms of net welfare and if there was a greater gain or loss overall
- explained that the changes to the gain in allocative efficiency was greater on an elastic good than an inelastic good
- integrated fully multiple graph references throughout their detailed explanations using correct economic terminology.

91400: Demonstrate understanding of the efficiency of different market structures using marginal analysis

Examination

Question One required candidates to illustrate and explain the impact of a marginal cost and average cost pricing regulation on consumer surplus and allocative efficiency for a natural monopoly. Candidates were also expected to explain the effect of the regulations on the Government, and the natural monopolist's profit.

Question Two required candidates to show the impact of a reduction in a fixed cost (interest) on two perfectly competitive firms; one with a larger loan than the other. Candidates were also expected to explain what fixed costs were, how the reduction impacted on the cost curves, and why both firms' output levels remained unchanged. The final part of the question required candidates to illustrate and explain the long-run profit situation for the individual firm that initially earned a subnormal profit.

Question Three required candidates to illustrate the impact of an increase in variable costs for a monopoly and use marginal analysis to explain the change in output. Candidates were also required to illustrate the impact of an increase in demand and compare and contrast the impact of both events on the monopoly's long-run profitability.

All three questions required the use of an economic model, through either graphing or explanation of the model, and were scaffolded by breaking the question into parts.

Candidates were expected to incorporate specific graph references and use appropriate economic terminology in their explanations.

Observations

Most candidates made correct changes to graphs, labelled most of their graphs, and incorporated specific graph references into their written explanations.

Those candidates who used marginal analysis well included all key points in their explanation, for example $MC > MR$, marginal losses made and output reduced from Q_e to Q_1 where $MC_1 = MR$ and profits are maximised.

Writing irrelevant material was an issue for some candidates, for example writing about the economic profit when the question asked for what fixed costs were and how they impacted firms' cost curves. Reading all parts of the question before responding would have helped some candidates.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- showed most changes on graphs, including shading and labelling the changes
- explained that consumer surplus is greater under marginal cost pricing due to lower price or higher quantity
- explained allocative efficiency by referring to demand and supply or deadweight loss
- used partial marginal analysis explanations
- described fixed costs as independent of output
- linked characteristics of perfect competition and monopoly to the reason for their long-run profit levels, rather than merely stating the characteristics.

Candidates who were awarded **Not Achieved** commonly:

- made inaccurate changes to graphs
- listed characteristics of perfect competition and monopoly without explaining how those characteristics affected what the firm did, for example due to making subnormal profits, firms leave, they can because there are no barriers to entry, and that leads to a decrease in supply, etc, rather than just stating that perfect competition firms have no barriers to entry / exit
- did not use marginal analysis in their explanations.

Candidates who were awarded **Achievement with Merit** commonly:

- added more detail to their explanation by stating why or how, for example consumer surplus is greater under MC pricing because the price consumers pay is lower and the quantity they consume is higher than AC pricing
- made accurate changes to graphs and referred to specific labels from the graphs in their explanations
- used marginal analysis accurately in their explanations
- used correct economic terminology in their explanations.

Candidates who were awarded **Achievement with Excellence** commonly:

- integrated correct economic terminology and multiple graph references throughout their detailed explanations
- included all the relevant information in their marginal analysis and long-run profit explanations, for example referred to $MC > MR$, marginal losses made and output reduced to Q_1 where $MC_1 = MR$ and profits are maximised.

91403: Demonstrate understanding of macro-economic influences on the New Zealand economy

Examination

Question One required candidates to use the aggregate demand and aggregate supply (AD / AS) model to analyse how supply-side policies could curb inflation and achieve the Government's goal of price stability. Candidates needed to identify which factors from the resource material raised the price level and which ones reduced the inflationary pressure in the short term and / or long term. Knowing the current inflation rate allowed high performing candidates to support their explanation of the price stability goal in New Zealand when referring to the Policy Targets Agreement.

Question Two required candidates to use the AD / AS model to analyse the impact of a Free Trade Agreement with the United Kingdom on the Government's goals of economic growth and balancing the current account. Candidates needed to understand the unique impact of the pandemic on trade and the factors affecting the balance on goods and the balance on services, and the flow-on effects of trade on economic growth.

Question Three required candidates to use the circular flow model and the concept of the multiplier to analyse the impact of the loss of international tourism on employment and economic growth. Candidates were expected to define the marginal propensities to spend and save as the components of the multiplier and explain the impact of the rise in domestic spending during the pandemic on the economy as a result. Understanding the money flows and real flows of the circular flow model was essential to these explanations, as well as knowing the current growth rate and employment rate in the New Zealand economy.

All three questions required the use of an economic model, through either graphing or explanation of the model, and were scaffolded by breaking the question into parts. Candidates were expected to use appropriate economic terminology and their knowledge of the contemporary New Zealand economy.

Observations

Candidates who achieved at a higher level, interpreted the resource material provided correctly, demonstrated knowledge of economic concepts, content and specific terminology, for example price stability, marginal propensity to consume, etc, and read the questions thoroughly. They identified the macroeconomic influences included in the question and the impact on the Government's goals of balancing the current account, price stability, economic growth, and employment. They also discussed the magnitude of those impacts and compared the costs and benefits of policies to achieve the Government's goals.

Candidates who did not achieve did not demonstrate understanding of the resource material or economic models provided, attempted only parts of a question, and used little economic knowledge or terminology in their explanations. They also repeated the resource material or the question without providing any further response.

Most candidates who did achieve used economic models and economic terminology in their explanations, making the links between the context of the questions and the theory of the standard.

Grade awarding

Candidates who were awarded **Achievement** commonly:

- labelled and shifted the AD and AS curves correctly
- used some of the resource material in their explanations
- used some economic terminology in their explanations.

Candidates who were awarded **Not Achieved** commonly:

- repeated the resource material without adding their own knowledge
- answered only parts of questions
- used generic terms in their explanations.

Candidates who were awarded **Achievement with Merit** commonly:

- identified factors affecting aggregate demand and aggregate supply
- understood the context and the requirements of the questions
- referred to the resource material and economic models in their explanations using correct economic terminology
- explained impacts in detail by providing multiple reasons from the resource material.

Candidates who were awarded **Achievement with Excellence** commonly:

- demonstrated consistently their knowledge of the unique nature of the contemporary New Zealand economy
- understood the differences between short and long-term impacts of policies
- integrated the resource material and economic models into their detailed explanations
- compared and contrasted the impact of macro-economic influences on the Government's goals.