



# Strategic **ECONOMICS MC**

How to write and answer quality multiple choice questions for HSC assessment in Economics.

Matthew Parsons

# Table of CONTENTS

Chapter 1	Introduction	1
Chapter 2	Writing definitional questions	8
Chapter 3	Writing application questions	16
Chapter 4	Writing calculation questions	26

# Chapter 1

# INTRODUCTION

The HSC examination for Economics contains 20 multiple choice questions within the three hour paper - which means that this assessment modality is often used in teaching and learning activities in the Preliminary course, and also in internal assessment during the HSC year.

It is important that students are prepared in answering HSC style multiple choice questions, and therefore that teachers (and students) know how to write multiple choice questions in the style that is used in HSC assessment. This book aims to analyse and deconstruct the style, structure and approach of multiple choice questions used in HSC assessment in Economics to assist teachers prepare them more efficiently, and to a higher quality, and also to assist students recognise, decode, and answer multiple choice questions efficiently.

Overall, the goal of teachers in writing multiple choice questions to assess HSC economics material should be to craft questions **that could easily sit within the NESA HSC paper** in any given year.

That is the standard to which one should write - and which is not an overly onerous standard to achieve. However, that standard can only be achieved where the person writing the questions is very familiar with the historical, typical approaches and conventions used in the multiple choice questions within NESA HSC papers.

To commence that journey we will first analyse the structure and approaches found within the 2023 NESA HSC paper, a pdf of which can be readily located on the NESA website.

---

Teachers should consider teaching their students how to write HSC quality multiple choice questions and get them to do that as a learning activity when syllabus content is completed.

## THREE DIFFERENT CATEGORIES OF QUESTION

One can identify three distinctly different types of multiple choice questions used in HSC Economics exams (which are addressed in separate chapters below):

1. definitional questions
2. application questions (cause and effect)
3. calculation questions

As outlined in the table below, in the 2023 HSC exam, definition questions were 15% of the questions, the largest category were application questions (55%), and 30% of the questions were calculation questions. In terms of balance, when writing a set of 20 multiple choice questions it would be recommended to have regard to these breakdowns (or three year averages) to ensure a similar balance and weighting of focus in the questions you create.

### Analysis of 2023 HSC multiple choice questions

Category	Questions	No.	%
<b>Definitional</b> recall/identification of definition or data	1, 2, 7	3	15%
<b>Application</b> Cause, effect, benefit of, reason for, classification	3, 4, 5, 6, 9, 10, 11, 12, 14, 15, 16,	11	55%
<b>Calculation</b> Provision of inputs and student calculates identified measure	8, 13, 17, 18, 19, 20	6	30%

Some other things to note:

- all of the definitional questions occurred within the first 10 questions, and two of them within the first two questions of the paper. This is because the difficulty of the questions increases so that the earlier questions are easier than the later questions. It follows that when constructing a set of 20 questions one would expect to have definitional style questions within the first half, and most likely featuring strongly within the first 5 questions.
- as a study, economics is essentially about understanding cause and effect relationships - an increase in some aspect of life in the economy results in a change in some other measured aspect. Consider exchange rates. There are a number of factors which can cause an appreciation of the exchange rate. On the other hand, there are a number of impacts of an appreciation of the exchange rate (irrespective of the cause). It follows that these style application questions, asking about either cause, or effects, are the most numerous of the question types in multiple choice assessment.
- economics is also a technical discipline, with a number of measures which require calculation - hence calculation questions feature significantly in multiple choice assessment. Note that 80% of the calculation multiple choice questions feature in the second half of the questions (that is in the range of question 11 to question 20), and the last four questions (notionally the most difficult on the paper) were calculation questions.

## STIMULUS

Stimulus is where some context, or additional information, is provided before the question (referred to as the stem). This may be textual, it may include one or more numbers textually or in a table, or it may include a graphical presentation of information.

The table below analyses questions from 2021-2023 to consider the frequency and type of stimulus provided in the questions:

	2023	No.	2022	No.	2021	No.
No stimulus	1, 2, 6, 7, 8, 12	6	1, 3, 4, 5, 9, 13, 14, 15	8	1, 3, 5, 7, 8, 13, 15	7
Textual stimulus	5, 10, 14, 15	4	2, 6, 7, 10	4	2, 4, 9, 12, 14, 16, 19	7
Numeric non tabular stimulus	3	1	12	1	6	1
Tabular stimulus	9, 13, 17, 18, 20	5	11, 16, 17, 18	4	11, 17, 18, 20	4
Graphical stimulus	4, 11, 16, 19	4	8, 19, 20	3	10	1
<b>Total with stimulus</b>		<b>14</b>		<b>12</b>		<b>13</b>

Some things to note:

- for each of the previous three years, stimulus has been used in at least 60% and at most 70% of questions
- tabular stimulus was **always** used for 4-5 questions
- graphical stimulus was typically 3 or 4, but always at least once
- graphical stimulus was often used in questions 18-20 in the paper

Typically stimulus is more commonly used in conjunction with application (cause/effect/results in) and calculation questions.

This then provides us with some **general design parameters** for questions as follows:

- questions are of increasing difficulty (easiest early rising to hardest at 19/20)
- questions come from definitional (25%), application (47%) and calculation (28%) styles
- word count length of questions is typically between 18-22, down to a low of 11 words
- answers to questions typically have word counts less than five words, and range up to a maximum of 15 words
- stimulus would be used in 60%-70% of questions, with 15% graphical stimulus and up to 25% tabular stimulus

The following chapters then consider the different styles of questions.

## Chapter 3

# WRITING CAUSE AND EFFECT QUESTIONS

Within any set of 20 multiple choice questions in an HSC examination paper the largest number of questions will be of the style of **cause and effect questions**. Indeed, these will be typically around 50% of the questions presented in the paper.

Economics, as a social science, is essentially about generating an understanding of the operations of systems and behaviours - the interactions of buyers and sellers and markets. In seeking to understand those systems, the discipline has identified a number of concepts (economic growth, unemployment, inflation, exchange rates etc) and has observed and documented what **causes** changes in those variables, and also what **effects** or impacts will flow on other things if a change occurs in the variable (howsoever caused).

This then provides the content areas for the cause and effect questions. You can consider the content area as a domino - a cause question will be asking about the things that may strike the domino and cause it to move, whilst an effect question will be asking about the dominoes that the selected domino may hit when it falls.

It is perhaps easiest understood with an example.

### **Design decision 1: What is the domino?**

In writing one of these style questions there are several question design decisions, and the first decision is what economic concept or variable is going to be the focus of the question - that is, what are we going to select as the relevant domino.

Let's assume we have decided that the relevant domino is economic growth.

### **Design decision 2: What is the direction of movement of the domino?**

Having selected economic growth as the focus, we need to determine if we are asking about an increase, or a decrease in the variable. This is critical because it will shape the answers, irrespective of whether we decide to look at causes or effects. For example, the effects of a change in economic growth will be quite different whether the change is an increase in economic growth, or a decrease in economic growth.

Let's assume we decide we decide that there is negative economic growth in the hypothetical economy for the question.

## Chapter 4

# WRITING CALCULATION QUESTIONS

At least 20% - 28% of the questions within a twenty question multiple choice set are likely to be calculation multiple choice questions. Calculations will require information to be presented to the student (either textually, in a table, or in a graphical representation) and then the question and answers fashioned.

We will first consider the language used for the question and answers, and then the language used to present the stimulus information required for the calculation.