

St Andrew's Junior College 2024 JC1 H1 ECONOMICS

Case Study Skills Package

Table of Contents

No.	Content	Page Nos.
1.	Introduction	
2.	Question Types	
3.	Making Sense of Data	
4.	Tackling Higher Order Questions	

1. Introduction

What is a case study and what are case studies trying to test you for?

- It generally consists of two to three pages of data presented in textual, numerical or graphical form. Each case study will present contemporary multifaceted economic issues or policies, which may be from one or more themes in the syllabus.
- Case studies therefore tests students' ability to apply their understanding of economic concepts, theories and principles in analysing, synthesising and evaluating economic issues, perspectives or policies, with reference to the data provided.
- What this means is that a case study is NOT an English comprehension test. It does require you to comprehend the data given but more importantly, you have to apply your economic theories and concepts to account for or predict what happens.

H1 Paper Details

	There will be two compulsory case studies . Candidates are required to answer all questions for each case study.
Description	Each case study carries 40 marks and constitutes 50% of the total marks.
	About 16 marks of each case study questions will be for <u>data</u> <u>response questions</u> , and about 24 marks will be for <u>higher-order</u> <u>questions</u> .
Duration	3 hours
Mark Weighting	80 marks (100%)

What is expected from me?

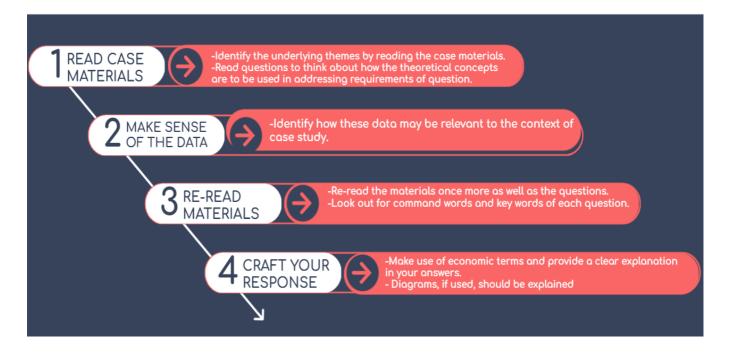
- It requires analysis specifically related to the stimulus material provided.
 - Parts of the questions may, however, be answered without reference to the data given. These are necessary to ensure wide coverage of the topic to which the stimulus material relates and to accommodate a greater diversity of questions.
 - Such "stand alone" questions also facilitate a higher degree of student input providing an opportunity for additional relevant material to be included in answers.
 - Gives the student the opportunity to demonstrate wider reading of the subject outside the standard information available in lecture notes.

What else should I bear in mind?

- Avoid the mistake of assuming that a case study paper requires no prior knowledge of economics. The examiner will be using the data as stimulus material specifically to assess your economic knowledge and competence.
 - For example, with for higher-order discursive questions, the data provided should not be seen as the only material that is relevant to an issue raised for consideration in a question.
 - o Instead, the material should be seen as a starting point for analysis, synthesis and evaluation and it should stimulate the candidate to use their own knowledge and understanding to give a broader and more considered response than one restricted to the material provided in the data.

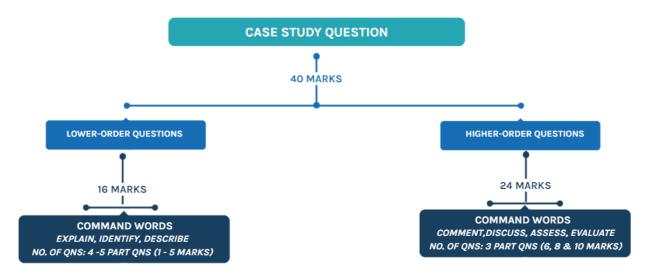
HOW TO APPROACH A CASE-STUDY QUESTION?

FOLLOW THESE STEPS TO HELP YOU



2. Question Types

A typical case study question would consist of seven or eight part-questions, including subparts. About 16 marks of each set of case study questions will be for data response questions and about 24 marks of each set of case study questions will be for higher-order questions.



Part 1: Turning Data into Information

Generally, the lower-order questions of the case study question requires you to make sense of data provided to do the following:

- a) Describe a trend
- b) Compare and contrast variables
- c) Describe a relationship between two variables

We will examine these three question types here.

a) Describe a trend

(E.g. Describe the trend in oil prices from 1980 to 2000.)

DARE

- **D-** General **D**irection of the trend
- A- Anomaly to general trend
- **R-** Rate of change in general trend
- E- Extent of change in general trend

i) State the general trend

To identify the general trend, the **key idea** is to **give a general picture** which **emphasises a repeated or consistent pattern** and **not a year-on-year detailed analysis**. This gives the overall change. Usually, the overall change is the same as the general trend. Confirm that this is the case by looking at the data points year by year and whether or not they move in the same direction as the overall change.

Stating the general trend:

"There is an **increasing/decreasing trend** in (variable) from (start period) to (end period)."

Never regurgitate the data line by line, year by year. This leads to a descriptive and chronological answer that is frowned upon by examiners.

ii) State the most significant refinement

Here are some possibilities of stating refinements:

- Identify the **reversal of trend** or **irregularity** against the general trend.
- Identify the period with the **most marked change** in the variable.

Stating the refinement:

"However, there is **a(n) decrease/increase** from (specific period) to (specific period)."

"The **largest increase/decrease** occurs from (specific period) to (specific period)."

In stating the refinement, there might be **several possible refinements**, but state **the most significant one.** When identifying the period with the **most marked change** in the variable, use terms like "**largest**" instead of "**large**" to show comparison.

What happens if there are two distinct trends in the graph? Am I still able to use an overall trend description?



b) Compare and contrast variables

(e.g., Compare the prices of oil and rice from 1980 to 2000.)

If we are required to <u>compare</u> variables, we should highlight <u>both the similarities and</u> <u>differences</u> in the variables. On the other hand, to <u>contrast</u> variables, we focus on the <u>differences</u> between the variable.

In comparing and contrasting variables, the criteria for comparison should be clarified.

Examples of the criteria can include:

- 1. **Levels of variables** (variable) is higher/lower than (other variable) *or* both are the same
- 2. **Trends of variables** (variable 1) is generally increasing while (variable 2) is generally decreasing *or* both are generally increasing/decreasing
- 3. **Volatility of variables** (variable 1) is more/less volatile than (variable 2) *or* both are volatile/relatively stable

In presenting your answer, you should do so <u>criteria by criteria</u> rather than <u>variable</u> <u>by variable</u>. For instance,

Answer A:

"Price of rice generally increased while the price of oil generally fell. At the same time, the price of oil was more volatile over the entire period compared to the price of oil."

Answer B:

"Price of rice was generally increasing and did not fluctuate a lot whereas the price of oil was generally decreasing and was volatile."

Both answers show that the student was able to read the trend and refinement in trend, but answer A is presented criteria by criteria (general trend and volatility) whereas answer B is presented variable by variable (price of oil and price of rice).

Answer B (and variations of it) will warrant zero marks as no attempt is made at comparing the two variables.

Tip:

When stating the similarity or difference, you need to use phrases to show comparison of the trends.

For similarity	Use words like "both" or "all" if there are more than 2 trends.
For difference	Use words like "higher", "lower", "faster", "slower", "more" or "less".
	Use words like "whereas", "on the other hand" or "in contrast".



c) Describe a relationship between two variables

(e.g., Identify the relationship between price and quantity of oil from 1980 to 2000.)

In order to infer a relationship between two variables, we would need to **observe the trends in the two variables** and whether **they move in the same or opposing directions**.

Generally, the <u>two types of relationships</u> between <u>two variables</u> we are concerned about are:

1. **<u>Direct relationship</u>** – Both variables move in the <u>same direction</u>.

Terms like "proportional" is usually used to describe scientific relationships and as such we try to avoid such terms.

2. <u>Inverse relationship</u> – Both variables move in <u>different directions</u>.

Again, terms like "inversely proportional" is usually used to describe scientific relationships and its use is avoided.

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When identifying the relationship between two variables:

Variables in	Positively related or direct relationship between the two variables.				
same direction					
Variables in	Negatively related or inverse relationship between the two				
opposite direction	variables.				



Part 2: Applying Knowledge to Information

When answering lower-order questions, we are also required to make use of economic analysis to explain what was identified.

Some questions explicitly require the use of a diagram (e.g. With the aid of a diagram, explain...). For such questions, marks would be awarded for the drawing of an accurate diagram.

Other questions implicitly require the use of a diagram (e.g. With the aid of economic analysis, explain...). For such questions, marks are not awarded for the drawing of the diagram. However, the usage of accurate diagrams in the explanation would be credited.

We need to firstly identify the causal link/relationship to be analysed, before deciding on the relevant economic framework (and corresponding diagram) to be used.

Causal link/Relationship	Economic Framework
 Actual growth – increase in resource utilisation Potential growth – increase in productive capacity Resource allocation for an economy 	PPC
 Determination of market equilibrium Changes in the market – Direction (demand and supply), extent/magnitude (elasticity) Impact of government intervention on price, output 	Demand/Supply/ Elasticity
 How externalities result in allocative inefficiency Impact of government intervention 	Cost/Benefit
 Equilibrium national income Changes in equilibrium national income Changes in economic growth, inflation, unemployment 	AD/AS

a) Explaining trends

(e.g., Account for the trend observed in oil prices from 1980 to 2000.)

In <u>explaining trends</u>, it is <u>important</u> to <u>explain</u> <u>both</u> the <u>general trend and</u> <u>refinement</u>.

Making use of information from the extracts, we are required to apply the relevant economic framework to answer the question.

Always remember to address the question!

For instance, if the question is on explaining the trend in oil prices, do not merely explain the demand and/or supply factors without continuing on to explain the impact on equilibrium oil prices.

b) Explaining similarities and differences

(e.g., Compare the prices of oil and rice from 1980 to 2000.)

For such questions, it is important to explain <u>all</u> the points of similarities and/or differences identified in the previous part of the question.

Once again, making use of information from the extracts, we are required to apply the relevant economic framework to answer the question.

c) Explaining relationships

(e.g., Explain the relationship between price and quantity of oil from 1980 to 2000.)

For such questions, it is important to explain the relationship identified using the relevant economic framework and provide possible reasons for why the economic relationship might not have been true throughout the entire period.

As per all types of causal analysis, make use of information from the extracts to apply the relevant economic framework in answering the question.

3. Making Sense of Data

We now move on to examining the economic data that we will be dealing with.

In dealing with data, we have to be clear of the type of data, as well as how to interpret them.

Part 1: Types of Data

Generally, we can be presented with 3 different types of data:

- 1. Textual (E.g. extracts)
- 2. Numerical (E.g. tables)
- 3. Visual (E.g. graphs)

Examples of the different types of data:

1. Textual

Source: 9570 H2 Econs Specimen Paper 1

Extract 3: Weak inflation adds to risk of further drop in the Singapore dollar

The external value of the Singapore dollar is approaching a four-month low. Signs are that weak inflation and a gradual economic recovery will leave monetary policy unchanged at the Monetary Authority of Singapore's (MAS) April monetary policy review. Inflation data due this week is forecasted to show only a slight increase, which would give little cause for the MAS to prevent further currency declines by adjusting the exchange-rate band it uses to ensure price stability.

Unlike most other central banks, the MAS uses the currency as its main monetary tool, rather than interest rates. 'We expect the central bank to maintain the neutral policy,' said a currency strategist at Australia & New Zealand Banking Group Ltd. in Singapore. 'Inflation is emerging from deflation but will remain modest.'

Source: David Finnerty, Bloomberg, 21 March 2021

2. Numerical

Source: 8843 H1 Econs Specimen Paper 1

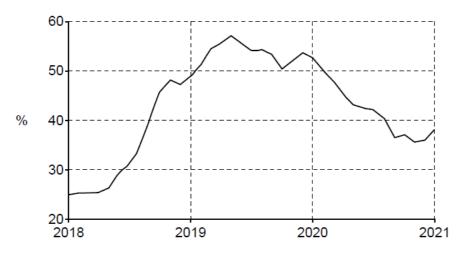
Table 1: Price elasticity of demand of different airline passenger types with respect to the basic price of an airline ticket

Airline passenger market	Price elasticity of demand
Long-haul business	-0.27
Long-haul leisure	-1.04
Short-haul business	-0.70
Short-haul leisure	-1.52

3. Visual

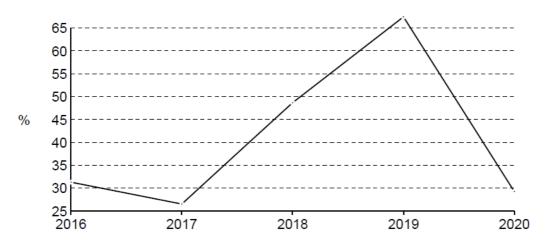
Source: 9570 H2 Econs Specimen Paper 1

Fig. 1.1: Argentina: Inflation rate, 2018-2021



Source: Tradingeconomics.com

Fig. 1.2: Argentina, Central Bank Lending Rate, 2016-2020



Source: data.worldbank.org

Part 2: Making Sense of Data

Interpretating data means understanding and making sense of the information presented. It involves analysing numbers, charts, graphs and other forms of data to draw conclusions, identify patterns and uncover insights.

Here are some tips to help you in making sense of data:

- a) Absolute level of variables

 Levels and changes in the variables can be identified through changes in the magnitude of the variables.
- **Absolute changes** refer to the <u>actual size/value of a certain variable</u> and what happens to the <u>actual size/value over a period of time</u>.



Worked Example

UK Brewery Industry

Year	1950	1955	1960	1965	1970	1975	1980	1985
Total Production (m bulk barrels)	24.9	24.5	26.1	29.9	34.4	39.2	38.9	46.5

Describe the trend in the production of beer between 1950 and 1985. [2]

b) Relative (Percentage) changes in variables
Relative changes refer to the <u>size/value of one variable with regard to</u>
some other variable and how this position changes over a period of time.

As we progress, we will be exposed to **percentage changes**. In dealing with percentage changes, we will have to take note of the following:

- 1. <u>Sign of percentage</u> this denotes the <u>direction of change</u>. A <u>positive percentage</u> <u>change</u> indicates that the <u>level of the variable is increasing</u>, whilst <u>a negative</u> <u>percentage change</u> indicates that the <u>level of the variable is falling</u>.
- 2. <u>Magnitude of percentage</u> this denotes the <u>extent of change</u>. An <u>increasing magnitude</u> indicates that the <u>variable is changing by a greater extent</u> compared to the previous time period, while <u>a decreasing magnitude</u> indicates that the <u>variable is changing by a smaller extent</u> compared to the previous time period.



Worked Example

Singapore Economy

Year	2009	2010	2011	2012
GDP at current market prices (% change)	1.9	15.0	5.8	3.4

1) Describe the trend in the \underline{GDP} of Singapore between 2009 and 2012.

[2]

2) Describe the trend in <u>economic growth</u> of Singapore between 2009 and 2012. [2]

c) Index numbers of variables

<u>Index numbers</u> are very useful for <u>showing the change in the value of a variable</u> <u>over a period of time</u>.

- a. It enables users of data to see the percentage change of the previous year without the need for any calculations.
- b. The year against which such comparisons are made is known as the base year and is always given a value of 100.

Index numbers give us an idea on the **variation in the value of a variable over a period of time or space.** (We will examine the construction of price indices in determining the General Price Level (GPL) of an economy, under the topic of Standard of Living and Macroeconomic Indicators later. The GPL gives us an idea of the prevailing prices in the economy over time.)

In <u>making comparisons over time</u>, a <u>base year</u> is identified and the <u>index of "100" is</u> <u>assigned to the value corresponding to that year</u>. <u>Changes in the index numbers</u> would thus <u>denote percentage changes in the variable</u> as <u>compared to the base year</u>.



Worked Example

USA exports of manufactures (volume) (1975 = 100)

Year	1970	1973	1976	1979	1982
USA exports of	78.3	95.6	105.2	1152	1126
manufactures	70.3	93.0	103.2	113.3	112.0

Describe the trend in USA exports of manufactures from 1970 to 1982. [2]

In <u>making comparisons over space</u>, a <u>base country</u> is identified and the <u>index of</u> "100" is assigned to the variable associated with the country. Changes in the index <u>numbers would thus denote percentage changes in the variable</u> as compared to the <u>base country</u>.



Worked Example

Productivity in manufacturing (UK=100)

Year	1970	1980	1990	
UK	100	100	100	
USA	280	270	260	
Japan	140	190	170	

Describe the changes in productivity shown by the table.	[2]	

It is also important for us to take note of the units in which the data is presented to us as it affects how we interpret the data, as well as the causal link that we are required to examine.

Some examples of units to take note of are:

a) Currency units - Peso/\$ vs \$/Peso

Based on the units used, different interpretations of the exchange rates will be drawn. Peso/\$ is the same as saying "peso per dollar". As such, an increase in the value of peso/\$ means that more pesos are required to purchase 1 unit of the dollar and indicates a depreciation of the peso. Conversely, if the unit used in \$/peso, an increase in value would indicate that each peso is worth more in dollars, indicating an appreciation of the peso!



Worked Example

Exchange Rate of the Peso

Year	1996	1997	1998	1999
Exchange Rate (Peso/\$)	26.22	29.47	39.89	39.97

Describe the trend in exchange rate of the Peso from 1996 to 1999. [2]

b) Sales units – \$ vs millions

In trend description, the difference in units would not change our response. However, in explaining the trend, the different units would determine how much we should be explaining. In this case, if sales is presented in monetary terms, we would have to explain how changes in demand and/or supply would affect both price and quantity, impacting sales ($P \times Q$). On the other hand, if sales is presented in quantity, we would focus on the changes in demand and/or supply impacting equilibrium quantity.

GDP measured at constant prices indicate real GDP, whereby the effects of inflation have been taken into account. On the other hand, GDP measured at current prices indicate nominal GDP, whereby the effects of inflation have not been considered. Again, the difference in units would not change our response in trend description. However, in explaining the trend, changes in GDP at constant prices can only be explained by changes in real output, whereas changes in GDP at current prices can be explained by changes in both real output and general price level

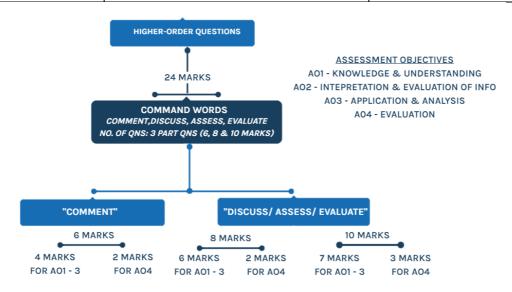
4. Tackling Higher Order Questions

 Candidates are expected to apply relevant economic concepts, theories and principles to analyse issues and to evaluate perspectives or policies in answering higher-order questions. They should synthesise and construct coherent arguments to arrive at wellreasoned judgements and decisions.

Types of Higher Order Questions

 Part-questions with higher mark tariffs (6, 8 and 10 marks) have a Levels of Response marking guide.

Total Marks	Level of Response mark range	Marks for evaluation
6	L1 1-2m	1-2
	L2 3-4m	
8	L1 1-3m	1-2
	L2 4-6m	
10	L1 1-3m	1-3
	L2 4-7m	



Strategies for Answering Higher Order Questions

1) Answer the question

Questions usually test your application of economic theories to the real world. Cambridge has encouraged students to be selective and to address the question rather than take a 'write all you know' approach.

A strong answer demonstrates	A weak answer demonstrates
✓ Clear economic analysis	✓ Largely descriptive responses
✓ Good application to context	✓ Lack of application to context
✓ Provides a reasoned evaluation	✓ Provides a partial or superficial evaluation

Questions are designed to encourage candidates to apply their economic knowledge and analysis to **unrehearsed** applications. Hence, you are advised not to provide rehearsed answers, which seldom answer the question directly.

Focus your responses on the topic at hand rather than give superficial responses that attempt to utilise a wide range of theory, much of which could be largely irrelevant to the question.

2) Draw diagrams and explain them too!

Cambridge perceives diagrams to be tools of economic analysis and many students who scored mid-range marks are often the ones who do not make sufficient use of diagrams to help explain their answer. Drawing diagrams but failing to refer to them in answers will leave the examiner wondering whether changes shown in the diagram or other important information were actually understood and relevant.

3) Have a 'big-picture' view of issues

Case Study Question 1 is **predominantly** focused on microeconomics, while Case Study Question 2 is **predominantly** focused on macroeconomics.

As such, you have to pay attention to the questions and discern if there is a need to also include discussion on macroeconomic issues in answering Case Study Questions 1 and vice versa.

4) Read the command word to determine what sort of essay structure to use

The importance of the command words used in questions is part of the key to achieving high performance standards. The command word is thus useful to determine how to approach and structure the essay.

5) Structure is important

Good structure improves clarity, and this helps to guide the examiner to see your viewpoint in the written answer. In fact, Cambridge has stated that "it is necessary to have a clear introduction and a well-reasoned conclusion, usually more than one or two sentences. Evaluative comments within the body of the essay also help."

6) Evaluation is not found only in the conclusion

Evaluative comments can be found within the body of the essay. You should make the effort to reflect on and question your assumptions as well as your conclusions as you write your essay.

7) Time management is important

It is interesting to note that when the paper is relatively easy, students tend to manage their time poorly. However, when the paper is difficult, students manage time better because they tend to be more discerning when answering the questions provided.

Question Interpretation (8 & 10 marks higher order questions)

When analyzing the requirements of questions, you may make use of the 3 Cs approach:

Command word - Directive word that informs you of how you should address the question

Concept/Content – These are the key words and phrases that indicate to you which concepts/framework/content should be used to respond to the question (In these questions, there will be a minimum of 2 required elements to analyse)

Context – What is the context on which the question is based? This may include specific markets, countries or economic agents

Command Words

Command words	Suggested interpretation		
Account for	Explain how a particular event or situation came about		
Analyse	Break down an argument or information into component parts and identify ways in which these parts are related.		
Analyse the extent to which	Show judgement over the relative importance of different arguments or events.		
Assess	Having written about both sides of an issue, you should come to a decision as to which, if any, is the best		
Comment	Give an informed opinion on a particular issue or decision. (this could be one-sided)		
Compare	Describe two or more situations and show the differences and similarities between them.		
Discuss	Give a balanced account of both sides and then come to a decision .		
Distinguish	Show your understanding of the differences between two (probably frequently confused) concepts. Similarities and differences need to be discussed and illustrated in distinguishing between the two concepts.		
Evaluate	Make a reasoned judgment, weighing up both sides of an issue or policy, before making a decision .		
Examine	Unravel the events that led to a particular set of circumstances or the validity of the reasoning that underlies a particular point of view. Stress the relative importance of the different arguments and their relevance to the basic issue under consideration.		
Explain	Interpret the meaning of a particular concept with an example to illustrate understanding.		
To what extent	This implies there is no definite answer to the question posed. Present both sides of the argument and come to a decision on the extent to which the statement is true (e.g., by stressing the strength of some arguments over others.)		

Identifying the Question Requirements

For these higher order questions, the mark scheme will indicate a minimum of **TWO requirements** that will need to be met for each question. The evaluation mark scheme will require a judgment to be made about these two requirements AND a summative conclusion is expected.

Therefore, when identifying the CONTENT needed to answer the question, identify the TWO requirements of the question and the relevant economic concepts/tools of analysis to use.

When marking the higher order questions, examiners look out for whether responses

- Display only Knowledge [K]
- Comprise Cursory Arguments [C]
- Are Developed [D]

In every essay, there are TWO required elements.

- If both elements are explained in an analytical way **[D+D]**, the answer will score the full marks for the questions.
- If both elements are explained in a cursory way [C+C], the answer will be in mid-L2.
- If both elements only show some knowledge [K+K], the answer will be in L1.

A guideline on how marks are allocated can be seen in the table below.

Annotation	Level	Mark out of 8	Mark out of 10
D+D	L2	6	7
D+C	L2	6	6
D		5	5
C+C	L2		
С	L2	4	4
K+K		1-3	1-3
K	L1		

[D]	 Answer is well focused on the question
What is an	 Answer is relevant to question and makes good use of well-
developed	explained theory
response?	 Relevant economic concepts, theories and principles have
	been applied analytically to the question (e.g. economic terms
	must be used)
	 There must be clear written explanation supported by a tool
	of analysis (e.g. diagram, use of elasticity concepts,
	explanation of multiplier process)
	 Diagrams MUST be accompanied by written explanations
	 Good ability at organising ideas or discriminating between
	relevant and irrelevant material
	 Coherent economic arguments
[C]	 Answer is relevant to question but theory is incompletely
What is a	explained or has minor errors
cursory	 Some ability at graphs with incomplete explanation
response?	 Limited ability at organising ideas or discriminating between
	relevant and irrelevant material (e.g. a pre-learnt generic
	answer)
	 Relevant economic concepts, theories and principles have
	been applied analytically to the question but they are
	explained in a cursory descriptive or incomplete manner.
[K]	 A response that shows knowledge and understanding of a
What is an	relevant economic concept(s) with basic description.
answer that	 This would include a definition of an economic concept.
only shows	There may be a few valid points .
knowledge?	 Answer may be mostly irrelevant or inaccurate.
	 Meaning of question may not be properly grasped.
	There may be basic errors of theory.
	 There may be inadequate explanations.
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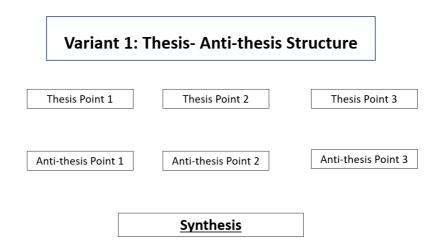
Structures for Higher-Order Questions

4 basic types of structures for higher-order questions:

1. Simple Thesis-Antithesis-Synthesis structure.

2. Variant 1 of T-A-S structure.

May be logical to have a small antithesis after every thesis point made, rather than grouping all the antithetical points to be discussed later. With the antithetical point that is related to the thesis point made, it may be very convenient to discuss it immediately while the issue is still fresh in the mind of the examiner.



Variant 2 of T-A-S structure.

An increasingly common question is the "**the extent to which**" type of questions. For example, a question which emphasises 'to what extent' within the wording of the question requires you to explain a range of possible reasons and then form a judgement about the extent to which one reason is more or less likely than other reasons in creating the outcome/consequence.

Here, you provide a thesis, then a STRONG antithesis that clearly rebuts the thesis. After this, you will discuss a WEAK antithesis. The weak antithesis stand accepts the validity of the thesis but argues that the thesis is not the most important reason/factor. Therefore, there are other factors which can be explained before concluding. In such cases, the structure may be relatively imbalanced but would be acceptable. For example, the thesis might have only one point, whereas there can be many points under both the strong and weak antithesis.

Variant 2: Thesis- Anti-thesis Structure

Argum	ents For	Arguments A	Against
Point 1	Point 2	Point 3	Point 4
Extent	Extent	Extent	Extent
	S	ynthesis	

3. 'Radiating structure'

Commonly found in demand-supply type questions, when the question is focused on the effect of changes in a particular market. You may be asked to discuss the effect on this particular market and how it affects **other markets**. In this case, there is no T-A-S structure as there are no costs or benefits (good or bad effects) to discuss. Such questions have a focal point, of which arguments will branch out from. Usually, you may be required to critique your own conclusions, in order to demonstrate analysis or evaluation.

4. Cause-effect question

This is commonly found in macroeconomic questions, where you are required to elaborate on the effects of a specified change on different aspects or one or more stipulated aspects on the macroeconomy. For such questions, there is no T-A-S structure. However you have the flexibility to structure the essay in the following manner:

- **Side1**: Positive effects & **Side 2**: Negative effects followed by synthesis **or**
- You may consider effects on different macroeconomic objectives, microeconomic objectives (if relevant) and synthesise. Sometimes the question might require you to weigh the relative significance or importance of factors.

Point-Extent-Approach (Problems/ Consequences/ Factors)

Point 1	Point 2	Point 3
Extent	Extent	Extent
	<u>Synthesis</u>	
\ \A/F	ich point is most serious/	

important/ relevant/ useful/ likely

Paragraph Development

Applying PEEL to paragraph writing

The PEEL model helps in providing a structured approach for constructing paragraphs and serves as a useful framework for the organisation of thoughts and arguments within each paragraph of an essay.

Point	Topic sentence or main idea that answers the question.	
Explain/ Elaborate	Economic concept that underlies topic sentence. You should	
	use relevant tool of analysis to support your point.	
Example	This would be in the form of real-world example or from	
	preamble	
Link	Demonstrate how example and concepts mentioned supports	
	overall argument.	

Task: Apply the PEEL model to answer the higher-order questions found in your tutorial.

Point			
Explain/ Elaborate			
Example			
Link			
Explain:			
Explain:			
Elaborate with ex	ample:	 	
Link:			

Evaluation Guide

What is Evaluation?

Evaluation is a key element to complement high level economic writing. Evaluation can enhance the quality of writing by bringing your analysis to a higher level. It requires good command of the different economic theories and real-world knowledge. Evaluation is the ability to judge the value of your theories and arguments for a given purpose. Evaluation is important because we want to be critical and contextual users of economics.

What is meant by evaluation?

- Weighing up pros and cons of an issue and deciding on a recommendation
- Considering an alternative point of view to that given in a question and justifying it
- Assessing the short- and long-term implications and **deciding on a course of action**
- Considering the costs and benefits of an action and taking a decision

When to Evaluate:

A maximum of 2-3 marks are reserved for evaluation in your higher-order questions.

How do I score evaluation marks?

To get full evaluation marks, you will need to have

- 1. well-explained evaluative judgments about both required elements in the question AND
- 2. a summative conclusion
- A summative conclusion is one that gives additional evaluation and not one that is repetition
 of evaluation given earlier. It demonstrates the ability to weigh up and make decisions about
 alternative options.
- Well-explained does not mean a long explanation it means that the evaluative judgment or decision is one that is supported by the arguments presented in the answer and is linked to the context of the question
- Evaluation judgments and decisions can be made within the body and within a final conclusion.

E3	One developed evaluative decision/judgement that is well explained and reasoned OR
	One unsupported evaluative statement and one evaluative decision/ judgement that is
	reasoned
E2	One evaluative decision/ judgment that is reasoned OR
	Two unsupported evaluative statements
E1	One unsupported evaluative statement
EO	No attempt at evaluation

Tips for Scoring Evaluation Marks

Before moving into the "evaluation mode" in your final paragraphs of your answer, use these phrases:

- In conclusion...
- Arriving at a decision...
- As the above analysis has indicated, the obvious recommendation is
- Both arguments have even weight... So...
- I will now make an evaluation..

How to Evaluate: CLAPE

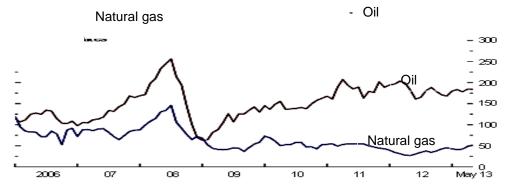
This is a suggested guide on how to evaluate. (Examples below are not exhaustive)

	CLAPE
С	 Context: Consider how realistic or feasible the analysis/prediction/proposed policy is in the real world Consider the root cause of the issue and context in which the issue is happening Consider the significance of issues in the given context Consider multiple Perspectives/Stakeholders
L	 Long-term and short-term effects: Consider the time frame / period in discussion Consider the problems associated with time lag (e.g. policy implementation) Consider the sustainability of policy
A	 Assumptions: Consider the underlying assumptions involved "Ceteris Paribus" may not hold in the real world + explanation
P	 Policies: Combination of policies Combination needs to be logical and possible (explain what the combination would be and how it would work) Best policy (consider what is "best") Appropriateness of policies (consider what is "appropriate") Conflicts between policies (especially in the context of achieving macroeconomic aims)
E This criteria of Effectiveness is an extension of the criteria on Policies	 Effectiveness: Relative Strengths & Limitations May not always be suitable for questions asking for the "BEST policy" because the criteria for "BEST" could include more than effectiveness. Feasibility

Section A: Short Excerpts from Case Studies

Question 1: Energy Prices [Adapted from 2014 H1 MJC Prelim]

Figure 1: Natural Gas and Oil Prices in United States (2005 = 100)



Source: WorldBank, accessed June 2014

CSQ Skill Package: Index numbers of variables (Pg 12)

Index numbers give us an idea on the variation in the value of a variable over a period of time or space.

In making comparisons over time, a base year is identified and the index of "100" is assigned to the value corresponding to that year. Changes in the index numbers would thus denote percentage changes in the variable as compared to the base year.

Extract 1: Global energy demand seen to go up 44% by 2030

Global energy demand is expected to soar 44 percent over the next two decades with most of the demand coming from developing countries such as China and Russia. Almost 75 percent of the rise in global energy demand through 2030 will occur in developing countries, particularly China, India, Russia and Brazil, the agency said. In response to this, more firms are investing resources heavily into the production of more efficient energy like renewable energy.

Source: Reuters, 2009

(a) Using Figure 1, compare natural gas and oil prices in US from mid-2008 to mid-2013.

○ CSQ Skill Package: Compare and contrast variables (Pg 4-5)

If we are required to **compare** variables, we should highlight both the **similarities** and **differences** in the variables.

In comparing variables, the criteria for comparison should be clarified.

In presenting your answer, you should do so **criteria by criteria** rather than variable by variable.

For similarity	Use words like "both" or "all" if there are more than 2 trends.		
For difference	Use words like "higher", "lower", "faster", "slower", "more" or		
	"less".		
	Use words like "whereas", "on the other hand" or "in contrast".		

(b) Explain how 'more firms are investing resources heavily into the production of more **[2]** efficient energy like renewable energy' (Extract 1) will affect the demand for oil.

Question 2: Banana Prices [Adapted from 2014 H1 TPJC Prelim]

Extract 1: EU Banana Market Trends

With production costs rising, banana suppliers to the EU market found themselves 'squeezed between falling returns and increasing production costs'.

We saw an 'extremely good price' reportedly prevailing at the beginning of 2011, when a reduction of between one-third and a half in supplies from countries such as Costa Rica, Ecuador and Cameroon provided strong support to prices. Indeed, on 15 February 2011, banana prices in the UK were reported to be double the level prevailing in February 2010.

However, the situation appeared to have been affected by: the scale of the economic downturn in certain parts of the EU; the outbreak of E. coli poisoning in May 2011 which impacted on consumer confidence in a range of fresh fruit and vegetables; and the political turmoil in the Middle East and North Africa, which saw 1 million boxes of Ecuadorian bananas per week looking for a new market. These demand factors proved critical to the EU banana market price collapse.

Source: Agritrade, 2012

[2]

(a) (i) Identify and explain one demand-side and one supply-side reason that may [4] cause changes in the EU monthly price of bananas in 2011.

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

Making use of information from the extracts, we are required to **apply the relevant economic framework** to answer the question.

	Causal link/Relationship	Economic Framework
•	Determination of market equilibrium	
•	Changes in the market – Direction (demand and	Demand/Supply
	supply)	

Always remember to address the question!

For instance, if the question is on explaining the trend in oil prices, do not merely explain the demand and/or supply factors without continuing on to explain the impact on equilibrium oil prices.

(ii) Based on your answer in (a)(i), explain how you would determine whether EU [2] monthly price of bananas are likely to rise or fall overall in 2011.

Question 3: Foreign Manpower Quotas in Singapore

The Work Permit allows semi-skilled foreign workers from approved countries to work in certain sectors in Singapore. The number of Work Permit holders a company can hire is limited by a quota.

Source: Ministry of Manpower, Singapore

(a) Using a supply and demand diagram, explain the impact of a quota on the market for [4] foreign labour in Singapore.

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

Some questions explicitly **require the use of a diagram** (e.g. With the aid of a diagram, explain...).

For such questions, marks would be awarded for the drawing of an accurate diagram.

Question 4: The Electric Vehicle and Energy Market [2023 ASRJC H1 Prelim]

Today's electric vehicles (EVs) are beyond anything nineteenth century drivers could imagine. From intelligent driving to proactive service and remote vehicle access, EVs can offer the safety and convenience today's consumers crave. With the rise in demand, EV sales in the United Kingdom (UK) are booming and traditional car manufacturers are ramping up their EV productions to meet the demand. With consumers aiming for a more sustainable future, it's not surprising that owning a car with lower carbon emissions has become desirable for many. This is great news in terms of addressing the underconsumption issue as EVs are expected to result in positive social benefits by way of reduced pollution emissions and because of the associated decrease in the consumption of gasoline that EV adoption would bring about. But environmental concerns are not the only reasons people give for wanting an EV; potential buyers also cited the benefits of fuel and cost savings. These factors are so appealing that intenders are willing to pay more for a new EV than they might for a conventionally fuelled equivalent.

However, there are still plenty of misunderstandings and false rumors about EVs, and the effect they have on vehicle sales is all too real. Half of potential buyers are still concerned about battery life and nearly a third also cite a lack of knowledge as a potential blocker for making a purchase, with 32% saying they do not understand the full benefits of purchasing an EV. For example, while the majority know that EVs run on electricity, some aren't so sure. Ford recently conducted an indepth study on the public opinion of EVs and found that lack of knowledge is a major deterrent to purchasing. The study found that 90% of Americans and Europeans believe EVs have poor acceleration. However, the reality is that the Tesla Model S is the fastest accelerating sedan on the planet. Overall, besides the EV subsidies given by various governments across the world, the study has revealed a need for more education to help the public understand what EVs can and cannot do.

Adapted from https://ibm.com, https://marketingweek.com and https://sciencedirect.com, accessed 19 July 2023

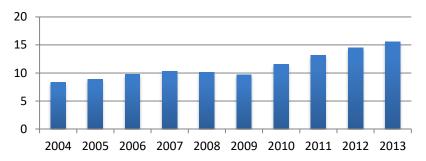
(a) The price mechanism allocates scarce resources in the free market through signalling, [5] incentive and rationing functions.

With the change in demand for electric vehicles (EVs) mentioned in Extract 1, explain how the price mechanism is able to perform any two of its functions in the EV market.

Section B: Case Study Questions

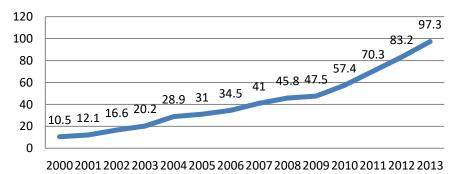
Question 1: Asia's Air Travel and Travellers [Adapted from 2014 SAJC H2 CT]

Figure 1: Number of visitor arrivals in Singapore
Singapore's Visitor Arrivals (millions)



Source: The Singapore Department of Statistics (DOS)

Figure 2: China Outbound Travellers¹
China Outbound Travellers (millions)



Source: China Outbound Tourism Research Institute

Extract 1: Economic Growth in ASEAN Drives Demand for Air Travel

Rapid economic growth, urbanization and a swelling middle class in emerging economies in China, India, and Southeast Asia are increasing demand for air travel. There are 170 cities in Asia with populations of over one million people each.

According to the Boeing Company, Asia-Pacific airlines will need almost 13,000 more airplanes over the next two decades. Estimates predict that by 2032 the total number of Asian carriers will reach 14,750, up from 5,090 in 2012. Based on existing aircraft orders over the next decade, Asian carriers will need 190,000 pilots.

According to Amadeus, a travel technology company, budget airlines or low-cost carriers from Indonesia, India, Thailand, and Malaysia accounted for over half of global low-cost carrier seat capacity growth in 2013. These low-cost carriers made most of the purchases at the Singapore Air

¹ China Outbound Travellers are citizens from China leaving their country to visit another country.

Show 2014. VietJetAir, a carrier founded only in 2011, purchased 63 Airbus A320 jets. Thai budget carrier Nok Air has agreed to buy 15 planes from Airbus's rival, Boeing.

As 2015 approaches, ASEAN should follow through on its commitments in forging the ASEAN Economic Community and allow airlines to operate freely in the region. Lifting barriers, harmonizing standards, and investing in infrastructure and people will elevate the performance of airlines and make it easier and cheaper for people to move about. The spill-over effects into tourism and adding fluidity to business travel will also serve ASEAN's regional agenda and the Asia-Pacific more broadly.

Source: The Asia Foundation, February 26, 2014

Extract 2: Rise of Budget Airlines

In Asia, low-cost carriers make up nearly 20 per cent of the aviation market today, up from almost nothing 10 years ago. Within Southeast Asia, budget airlines make up more than half of the intra-Southeast Asia market, an increase from 10 per cent a decade back.

In the Middle East, in just 10 years, air passenger traffic at Dubai, Abu Dhabi and Doha jumped more than 350 per cent, from less than 26 million in 2003 to 93 million in 2012.

A low-cost carrier or low-cost airline, also known as budget carrier or airline is one that generally has lower fares and fewer comforts. To make up for revenue lost in decreased ticket prices, the airline may charge for extras like food, priority boarding, seat allocating, and baggage, etc. The term originated within the airline industry, referring to airlines with a lower operating cost structure than their competitors. While the term is often applied to any carrier with lower ticket prices and limited services, low-cost carriers should not be confused with full-service airlines.

Source: News.asiaone.com, February 10, 2014

Questions

- (a) Using Figures 1 and 2,
 - (i) Compare the trend in visitor arrivals in Singapore with that of China outbound [2] travellers between 2004 and 2013.

CSQ Skill Package: Compare and contrast variables (Pg 4-5)

If we are required to **compare** variables, we should highlight both the **similarities** and **differences** in the variables.

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For difference	Use words like "higher", "lower", "faster", "slower", "more" or	
	"less".	
	Use words like "whereas", "on the other hand" or "in contrast".	

(ii) Account for the general trend identified in (a)(i).

[2]

CSQ Skill Package: Explaining Trends (Pg 6)

Making use of information from the extracts, we are required to apply the relevant economic framework to answer the question.

Always remember to address the question!

- (b) Explain what is meant by consumer sovereignty in the context of the air travel market. [2]
- (c) (i) Explain how the increase in the number of low-cost budget airlines may affect [4] the market of full-service airlines.
 - (ii) Explain the impact of global economic growth and the increase in the number [4] of low-cost budget airlines on the market for international air travel.
 - (iii) Explain how your analysis in (c)(ii) might be affected if the assumption of [2] 'ceteris paribus' does not hold.

[Total: 16 marks]

Additional Question

(d) Discuss the likely impact of global economic growth and the increase in the number of low-cost budget airlines would have on the market for international air travel.

Question 2: Living and Studying in the United States (US) [Adapted from 2018 JJC H1 Prelims] (Additional)

% change 6

5

4

3

2

1

0

2010 2011 2012 2013 2014 2015 2016 2017

Consumer Price Index (CPI)

Average annual rent

Average annual rent

Figure 1: Changes in the Prices of Selected Goods and Services in the US

Note: College refers to university in the US Source: Statista, accessed July 2018

○ CSQ Skill Package: Relative (Percentage) changes in variables (Pg 10)

In dealing with percentage changes, we will have to take note of the following:

- 1. **Sign of percentage** this denotes the **direction of change**. A **positive** percentage change indicates that the level of the variable is **increasing**, whilst a **negative** percentage change indicates that the level of the variable is **falling**.
- 2. **Magnitude of percentage** this denotes the **extent of change**. An **increasing magnitude** indicates that the variable is **changing by a greater extent** compared to the previous time period, while a **decreasing magnitude** indicates that the variable is **changing by a smaller extent** compared to the previous time period.

Extract 1: Rising rents make housing unaffordable

California's high housing costs have pushed many tenants to the edge of affordability. Even if they have steady work, the cost of putting a roof over their heads demands a staggering share of income. One reason rents have risen steadily in California is a lack of apartment construction relative to job and population growth. Those who are less well-off have to make tough decisions: move to a cheaper area or cut back on cellphone services, restaurant outings and other basic necessities.

Source: Los Angeles Times, December 2017

Extract 2: Rent control does more harm than good

California voters will decide in November whether to give cities new freedom to expand the use of rent control (a maximum price on rental units). The rent control battle comes as California continues to face a housing affordability crisis. Six of the nation's 11 most expensive rental markets are in the state, and rents have increased by 40% in the last three years. These prices affect low-income residents the most: 1.7 million California families pay more than half their income on rent. Rent control, tenants' groups thus argue, is necessary to insulate people from price hikes and allow them to stay in their neighborhoods.

But rent control is not without its woes, causing housing shortages that reduce the number of low-income people who can live in a city. It also disincentivises landlords from upgrading their rental units, resulting in entire neighbourhoods running the risk of becoming decayed and abandoned. Finally, landlords facing lower returns from rental units often convert them into housing units for sale, leading to fewer rental units in the rental market.

Another solution that has been surfaced to tackle the problem of rising rents includes giving households tax rebates or welfare payments to offset rent hikes. The money for the system would come from taxes on landlords, which would effectively spread the cost among all tenants and landowners instead of laying the burden on the vulnerable few.

Source: *Bloomberg*, January 2018 and *Los Angeles Times*, June 2018 **Extract 3: Colleges reduce tuition fees while online courses see higher enrolment**

US college tuition fees are growing at the slowest pace in decades, following a nearly 400% rise over the past three decades that fueled middle class anxieties and a surge in student debt. In the last three decades, higher education was one of the economy's most unstoppable growth sectors, with the number of two- and four-year colleges increasing by 33% over the period. However, this looks set to change in the next few years. Due to changes in population demographics, the number of new high-school graduates grew 18% in the early 2000s, but only 2% in 2017. The slowing growth in the number of domestic college-ready students has thus far been offset by growth in the number of foreign students seeking to study in US colleges. The number of Chinese college students in the US ballooned from 67 000 in 2006 to more than 350 000 today due to an emerging Chinese middle class willing to pay full price for a foreign education.

Still, college remains a daunting expense for many households. A Federal Reserve survey released in May showed 37% of Americans age 30 and younger who had not attended college said it was too expensive. As a result, some profit-driven colleges have started offering discounts on college tuition fees in a bid to attract students.

With traditional university programs getting more expensive and competitive, there has been a boom in the number of alternative degree programmes that are taking advantage of the internet and more flexible teaching and learning formats to fill the gap in the higher education market. Based on data from more than 4 700 colleges and universities, more than 6.3 million students in the US embarked on an online degree in 2016, a 5.6% increase from the previous year.

Source: Wall Street Journal, July 2017 and US News, January 2018

Extract 4: Is college worth it?

A recent list of top colleges in the Chronicle of Higher Education provides vivid evidence that higher education is the ticket to economic mobility – according to the Bureau of Labour Statistics, median annual earnings for Americans without a degree amounts to \$35 256 while the unemployment rate for the same population is 8%. In contrast, Americans with a degree have a median annual income of \$59 124 and 2.8% unemployment.

However, the full value of college education goes well beyond dollars and cents. College prepares students to succeed with not only the vocational skills to earn a good living but with the curiosity, adaptability and inclination to respond effectively to the changes and challenges they will face throughout their lives. These benefits extend beyond the college graduates themselves – cities with more college graduates offer higher wages to non-college graduates, all else being equal. And better-educated workers create and develop productive industries; that productivity in turn creates more good jobs for the rest. Ultimately, higher education in New York is a driving force – an economic engine of opportunity for businesses, students, employers and graduates who stay and work in the city, with New York's higher education institutions contributing an estimated \$7.5 billion to New York in 2012.

Source: Crain's New York Business, December 2017

Questions

(a) Extract 1 states "Those who are less well-off have to make tough decisions: move to a cheaper area or cut back on cellphone services, restaurant outings and other basic necessities."

Explain the above statement using the concepts of scarcity, choice and opportunity cost. [3]

- (b) Discuss whether the imposition of rent control is ultimately beneficial to society. [8]
- (c) Assess whether demand or supply factors account more for why the average price of college education only increased marginally in 2017.
- (d) Using evidence from the data, explain the determinants of a rational prospective student's decision on whether to participate in college education. [6]

[Total: 25 marks]

Question 3: The Decline of Food Prices and Sustainable Agriculture [Adapted from 2018 H1 DHS Prelim] (Additional)

Table 1: Annual Food and Crude Oil Prices

The table below shows an index of international food prices and crude oil prices over the period 2007-2016. The Food Price Index is a measure of the change in international prices of a basket of food commodities consisting of meat, cereals, dairy, edible oil and sugars.

Year	Food	Crude Oil
2002	100	100
2007	161	288
2008	201	392
2009	160	248
2010	188	329
2011	229	444
2012	213	448
2013	210	436
2014	202	396
2015	164	208
2016	162	176

[Sources: imf.org and fao.org, accessed 03.09.18]

400.0
350.0
300.0
250.0
200.0
150.0
2010
2011
2012
2013
2014
2015
2016

Dairy
Sugar

Figure 1: Annual Dairy and Sugar Price Index

[Source: fao.org, accessed 03.09.18]

CSQ Skill Package: Index numbers of variables (Pg 12)

In making comparisons over time, a base year is identified and the index of "100" is assigned to the value corresponding to that year. **Changes in the index numbers would thus denote** percentage changes in the variable as compared to the base year.

Extract 1: Food prices on a decline?

A decade after the food price spikes of 2007-8, conditions on world agricultural markets are very different. Production has grown strongly across commodities, and in 2017 reached record levels for most cereals, meat types, dairy products, and fish, while cereal stock levels climbed to all-time highs.

At the same time, demand growth has started to weaken. Much of the impetus to demand over the past decade came from rising per capita incomes in China, which stimulated the country's demand for meat, fish and animal feed. This source of demand growth is decelerating, yet new sources of global demand are not sufficient to maintain overall growth. Moreover, per capita consumption of many commodities is expected to be flat at a global level. This is notable for staple foods such as cereals and roots and tubers, where consumption levels are close to saturation levels in many countries. By contrast, demand growth for meat products is slowing due to regional variation in preferences and disposable income constraints.

Source: FAO Agricultural Outlook 2018, accessed 03.09.18

Extract 2: The end of the biofuel boom?

Starting in the early 2000s, biofuels emerged as a major 'consumer' of several crops. The US, the EU and Brazil, among other countries, encouraged the growth in biofuels as a way to reduce greenhouse gas emissions and/or achieve energy security. This stimulated global demand for maize and sugarcane, as well as vegetable oils, which in turn contributed to the robust demand growth in global agriculture. However, in recent years, biofuels have gradually disappeared as a source of demand growth and, as a result, the growth in demand for maize and vegetable oils will slow down significantly.

Source: CEPR Policy Portal, 28.02.18, accessed 03.09.18

Extract 3: Brazil releases maize from state reserves

The Government of Brazil announced in late April the sale of 1 million tonnes of maize from its state reserves. The measure aims to support livestock producers, amidst high domestic prices of yellow maize.

Source: fao.org, 15.05.18, accessed 03.09.18

Extract 4: Malawi bans maize exports

In early February, the Government reintroduced a ban on maize exports, which was lifted in late October following the bumper crop in 2017. The re-implementation of the trade measure reflects an expected fall in the 2018 output from last year's above-average level, mainly due to dry weather during the growing season. The ban aims to preserve national grain reserves and stem the impact of tighter domestic supplies.

Source: fao.org, 15.05.18, accessed 03.09.18

Extract 5: True cost of food

In many countries there is a worrying disconnect between the retail price of food and the true cost of its production. As a consequence, food produced at great environmental cost in the form of greenhouse gas emissions, water pollution, air pollution, and habitat destruction, can appear to be cheaper than more sustainably produced alternatives.

Source: FAO Agricultural Report 2015, accessed 03.09.18

Extract 6: Developing nations face challenges in achieving food security

Agriculture remained a key sector for developing countries, which contributed immensely to economic growth and well-being. Technology and innovation were urgently needed, especially for developing countries, to sustainably increase agricultural production to meet rising demands, improve the global supply chain and decrease food loss and waste.

Further, unsustainable agriculture and food systems, particularly food loss and waste, were major contributors to climate change whose adverse impacts of climate change had undermined the ability of all countries to achieve food security and sustainable growth.

Source: Inter Press Service, 19.12.16, accessed 03.09.18

Extract 7: China to deepen reform in agricultural sector

The gist of supply-side reform in China's agricultural sector is to increase the output of high-quality products based on green and innovative production.

The country will maintain its zero increase in the usage of pesticides and fertilizers and vigorously control water usage in the sector. For better farm produce, a group of innovation centres and alliances will be created, and outstanding research will be enhanced. The reform also aims to refine the quality supervision and standard system for farm produce, control soil pollution and encourage agricultural businesses to gain international certifications. China will promote the export of competitive farm produce, cross-border operation of agricultural enterprises and the establishment of global leaders in the sector.

Source: China Daily, 05.02.17, accessed 03.09.18

Questions

- **(a)** With reference to Table 1:
 - (i) Compare the change in food prices and crude oil prices over the period [2] 2007-2010.

CSQ Skill Package: Compare and contrast variables (Pg 4-5)

If we are required to **compare** variables, we should highlight both the **similarities** and **differences** in the variables.

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Use words like "both" or "all" if there are more than 2		
trends.		
Use words like "higher", "lower", "faster", "slower",		
"more" or "less".		
Use words like "whereas", "on the other hand" or "in		
contrast".		

(ii) Identify the relationship between food prices and crude oil prices over the period 2007-2016 and account for the relationship.

OCSQ Skill Package: Describe a relationship between two variables (Pg5)

In order to infer a relationship between two variables, we would need to observe the trends in the two variables and whether they **move in the same or opposing directions**.

Variables in	Positively related or direct relationship between the
same direction	two variables.
Variables in	Negatively related or inverse relationship between
opposite direction	the two variables.
·	

(b) Using Figure 1, compare the change in the prices of dairy and sugar over the period 2010-2016.

CSQ Skill Package: Compare and contrast variables (Pg 4-5)

If we are required to **compare** variables, we should highlight both the **similarities** and **differences** in the variables.

With reference to Extracts 1 and 2, use supply and demand analysis to explain [6] (c) the trend of food prices in recent years (2014-2016).

SCSQ Skill Package: Applying Knowledge to Information (Pg 6)

Other questions implicitly require the use of a diagram (e.g. With the aid of **economic analysis, explain...**). For such questions, marks are not awarded for the drawing of the diagram. However, the usage of accurate diagrams in the explanation would be credited.

(d) Extracts 3 and 4 refer to government intervention in agricultural markets.

With the use of a supply and demand diagram, explain how the differing government policies in the maize market seek to help the target groups in the two countries, and comment briefly whether success is guaranteed.

[6]

[2]

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

Some questions explicitly require the use of a diagram (e.g. With the aid of a diagram, explain...).

For such questions, marks would be awarded for the drawing of an accurate diagram.

[Total: 20 marks]

Question 4: Hawker Centres and Libraries in Singapore [Adapted from 2016 SAJC H2 MSA]

Table 1: e-Book Usage

	2010	2011	2012	2013	2014
e-Book Usage	3,485.9	4,406.2	7,483.7	10,611.7	10,758.4
(Thousands)	3,403.9	4,400.2	7,405.7	10,011./	10,730.4

Source: National Library Board

Extract 1: Hawker centres and libraries to be transformed

Mr Masagos Zulkifli, Minister for the Environment and Water Resources (MEWR), said the Government has embarked on a review to strengthen the role of hawker centres.

Singapore's hawker centres are "well-loved and vibrant community spaces that enrich our lives". The MEWR Minister said that more new hawker centres will be integrated with facilities and spaces for "meaningful daily interactions between residents". A total of 20 new hawker centres are being built over the next few years, with Bukit Panjang's first hawker centre the latest to be opened. To support lifelong learning – exemplified by the Government's SkillsFuture vision ² - public libraries will be transformed, said Dr Yaacob Ibrahim.

The libraries will cater to different reading and learning preferences, offer differentiated collections and interactive technology, with conducive library spaces to make learning more engaging and interesting, said the Minister for Communications and Information. The Ministry will promote information, media and cyber literacy through collaborative programmes with communities, libraries, private organisations, and other institutions of learning to boost productivity of Singapore's present and future labour force.

Noting the inclination towards consumption of digital content, The National Library Board (NLB) will be designing a whole new digital library service so that we can promote the use of the content together with our physical books.

Adapted from Channel NewsAsia, 21 Jan 2016

Extract 2: Foodfare to review price caps at hawker centre if necessary

Foodfare was appointed by the National Environment Agency (NEA) to operate the Bukit Panjang hawker centre. Tender documents for the hawker centre, which is slated to open by the end of this year, state that each stall should offer at least two items that are capped at certain prices. The price of dishes such as fishball noodle, nasi lemak and chicken rice are capped at between S\$2.50 and S\$2.70. The price ceilings for Western food are higher, such as S\$5.80 for pasta.

Responding to TODAY's queries, Foodfare said: "These caps are not to be held indefinitely and reviews would certainly be made should raw materials price increase or other cost pressures make it necessary for the adjustments."

Adapted from *Today*, 29 July 2015

² The SkillsFuture vision refers to the push for the process of lifelong learning, to make the learning experience from schools to apprenticeships to skills-based courses later in life "seamless".

Extract 3: Hawker centre draws sizeable crowd on opening day

Bukit Panjang's first hawker centre drew sizeable crowds on its first day of operations on Tuesday (Dec 29), with packed tables seen during lunch time. Located at the junction of Bukit Panjang Road and Bukit Panjang Road, the hawker centre is one of 20 being built by the Government over the next few years to ensure the availability of affordable food options.

When TODAY visited the centre - which also has a wet market - the 500-seater centre was mostly full and almost all 28 cooked food stalls were open. Ms Liu Wan Yock, 55, who runs a handmade pau stall with her husband, said: "We sold the Big Pau (priced at S\$1.20, down from \$1.50) very quickly ... I think it is because of the (cheaper) price, but these are also common food that people like. We will make a little more tomorrow."

Adapted from *Today*, 30 December 2015

Questions

(a) Describe the trend in e-book usage between 2010 and 2014 in Table 1. [2]

CSQ Skill Package: Describe a trend (Pg 3-4)

- 1. State the **general trend**
 - To identify the general trend, the key idea is to give a general picture which emphasises a repeated or consistent pattern and not a year-on-year detailed analysis. This gives the overall change.
 - "There is an **increasing/decreasing trend** in (variable) from (start period) to (end period)."
 - Never regurgitate the data line by line, year by year.
- 2. State the most significant **refinement**
 - Identify the reversal of trend or irregularity against the general trend.
 - Identify the period with the most marked change in the variable.
 - "However, there is a(n) decrease/increase from (specific period) to (specific period)."
 - "The largest increase/decrease occurs from (specific period) to (specific period)."

(b) Using Extract 1 and a diagram, explain how the transformation of public [3] libraries may affect Singapore's production possibilities curve (PPC).

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

Some questions explicitly require the use of a diagram (e.g. With the aid of a diagram, explain...). For such questions, marks would be awarded for the drawing of an accurate diagram.

	Causal link/Relationship	Economic Framework
(• Actual growth – increase in resource utilisation	
•	 Potential growth – increase in productive capacity 	PPC
•	Resource allocation for an economy	

- (c) "A total of 20 new hawker centres are being built over the next few years..." [2] (Extract 1) With an appropriate example, explain the opportunity cost incurred by the Singapore government when more hawker centres are built.
- (d) (i) Define effective demand. [1]
 - (ii) Explain the implications of the law of diminishing marginal utility on the [3] demand curve of hawker centre food.
- **(e)** With reference to Extract 2,
 - (i) Explain the objective of implementing a price ceiling and how it works. [3]
 - (ii) "...raw materials price increase or other cost pressures..." [4]

Using a diagram, explain how the factor in the preamble may affect price of hawker foods if there were <u>no</u> price caps.

PCSQ Skill Package: Applying Knowledge to Information (Pg 6)

For such questions, marks would be awarded for the drawing of an accurate diagram.

(iii) Using your own relevant knowledge and a diagram, explain the likely impact [4] of a price ceiling on consumer, producer, and society's welfare.

[Total: 22 marks]

Additional Question:

(f) Discuss whether a price ceiling on hawker food should be implemented when [10] there is an increase in raw material prices.

Question 5: Soaring Global Food Prices in Asia [Adapted from 2015 SAJC H2 MSA]



CSQ Skill Package: Index numbers of variables (Pg 12)

In making comparisons over time, a base year is identified and the index of "100" is assigned to the value corresponding to that year. Changes in the index numbers would thus denote percentage changes in the variable as compared to the base year.

Extract 1: Rising food prices

For the second time in three years, food prices began to soar in late 2010. In 2008, food riots broke out in developing countries around the world, as the prices of staples, particularly rice, jumped sharply. Good harvests and the worldwide recession, however, eased the pressure on food prices in 2009.

Prices began rising steadily again in the second half of 2010. Volatile weather patterns often attributed to climate change are wreaking havoc with some harvests. Rising global population and affluence are driving demand while heavy rains in Australia damaged wheat harvests to the extent that much of their usually high-quality crop have been downgraded to animal feed, experts noted.

In addition, rising energy prices results in a larger portion of the world's crops being diverted for biofuels. This is due to developed countries passing laws mandating greater use of non-fossil fuels. The most common biofuel is derived from the fermentation of sugar derived from wheat and other crops such as corn, sugar beets, and sugar cane. However, with food prices rising sharply in early 2011, many experts called on countries to scale back their headlong rush into green fuel development, arguing that the combination of ambitious biofuel targets and mediocre harvests of some crucial crops are contributing to high prices, hunger and political instability.

Extract 2: Government responses to rising food prices

Researchers are projecting that by 2013, food prices will soar to unparalleled heights, causing widespread hunger in the most vulnerable populations and social unrest, with an enormous potential for loss of human life. Governments around the world have undertaken measures like the provision of subsidises and price controls to help the poor in their countries cope with rapidly rising food prices. Nevertheless, prices remain high.

Adapted from The New York Times, 9th February 2012

Extract 3: Research projects to address food demand in Singapore

To address the future food demand and ease the impact of rising price of food on the poor, the Singapore government has been proactive. The National Research Foundation (NRF) has awarded \$\$30 million in research grants to projects under its Competitive Research Programme (CRP) Funding Scheme. The Singapore-based researchers have proposed projects to study a type of fish that will breed easily and grows twice as fast as the normal variety; as well as disease-resistant rice strains and fish that will be less susceptible to infection.

Adapted from Today, 4th August 2011

Questions:

(a) Describe the trend in food prices between 2007 and 2011 in Figure 1.

[1]

○ CSQ Skill Package: Describe a trend (Pg 3-4)

- 1. State the **general trend**
 - "There is an **increasing/decreasing trend** in (variable) from (start period) to (end period)."
 - **Never** regurgitate the data line by line, year by year.
- 2. State the most significant **refinement**
 - Identify the reversal of trend or irregularity against the general trend.
 - Identify the period with the most marked change in the variable.
 - "However, there is **a(n) decrease/increase** from (specific period) to (specific period)."
 - "The largest increase/decrease occurs from (specific period) to (specific period)."

(b) With the aid of an appropriate diagram, explain how a good harvest and the **[4]** worldwide recession caused an overall fall in food prices in 2009.

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

For such questions, marks would be awarded for the drawing of an accurate diagram.

We need to firstly identify the causal link/relationship to be analysed, before deciding on the **relevant economic framework (and corresponding diagram)** to be used.

- (c) (i) With reference to Extract 1, identify the relationship between biofuels and [1] food.
 - (ii) "...many experts called on countries to scale back their headlong rush into [4] green fuel development..."

Using a diagram, explain how the factor in the preamble and one other factor caused the price of food to increase in 2011.

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

For such questions, marks would be awarded for the drawing of an accurate diagram.

We need to firstly identify the causal link/relationship to be analysed, before deciding on the **relevant economic framework (and corresponding diagram)** to be used.

- **(d)** With reference to Extract 2, explain how the following measures help the poor cope with rising food prices.
 - (i) The provision of subsidies. [2]
 - (ii) The implementation of price controls. [3]
 - (iii) In each of the above cases in (d)(i) and (d)(ii), will the market reach a state of equilibrium after the measures are implemented?

(e) (i) Using a production possibility curve, explain how the research grants awarded [3] by the Singapore government will help to address food shortages.

CSQ Skill Package: Applying Knowledge to Information (Pg 6)

For such questions, marks would be awarded for the drawing of an accurate diagram.

We need to firstly identify the causal link/relationship to be analysed, before deciding on the **relevant economic framework (and corresponding diagram)** to be used.

Causal link/Relationship	Economic Framework
 Actual growth – increase in resource utilisation Potential growth – increase in productive capacity 	PPC
Resource allocation for an economy	

(ii) Explain the opportunity costs incurred by the Singapore government when it awarded S\$30 million in research grants to the project outlined in Extract 3.

[Total: 22 marks]

Additional Question

(f) Discuss whether the provision of subsidies or the implementation of price [8] controls is a better way to help the poor cope with rising food prices.

Reflection Jot down your key takeaways after you have completed your tutorial package for Price Mechanism & its Applications Part 1.