MARKER CODE

Student Personal Identification Number

South Pacific Form Seven Certificate

ECONOMICS

2014

QUESTION and ANSWER BOOKLET

Time allowed: Two and a half hours

INSTRUCTIONS

Write your **Student Personal Identification Number (SPIN)** in the space provided on the top right hand corner of this page.

Answer **ALL QUESTIONS**. Write your answers in the spaces provided in this booklet.

If you need more space for answers, ask the Supervisor for extra paper. Write your SPIN on all extra sheets used and clearly number the questions. Attach the extra sheets at the appropriate places in this booklet.

Section A Short Answer Questions 75 minutes

Section B Economic Analysis 75 minutes

Major Learning Outcomes (Achievement Standards)	Skill Level			Weight / Time
	Band 1 ***Basic***	**Band 2** ***Proficient***	**Band 3** ***Advanced***	
EcoA: Demonstrate understanding of key ideas about the operation of the market system, and analyse how decisions are made and their outcome in a modern market economy.	17 questions	6 questions	2 questions	35% 75 min
EcoB: Demonstrate understanding of the part governments play in allocating resources, particularly where the market does not result in efficient or equitable outcomes.	5 questions	1 question	1 question	10% 22 min
EcoC: Demonstrate understanding of the workings of the economy as a whole and also of the effects of government policy.	13 questions	3 questions	2 questions	25% 53 min
TOTAL	**35** questions	**10** questions	**5** questions	**70% 150 min**

Check that this booklet contains pages 2-16 in the correct order and that none of these pages is blank.

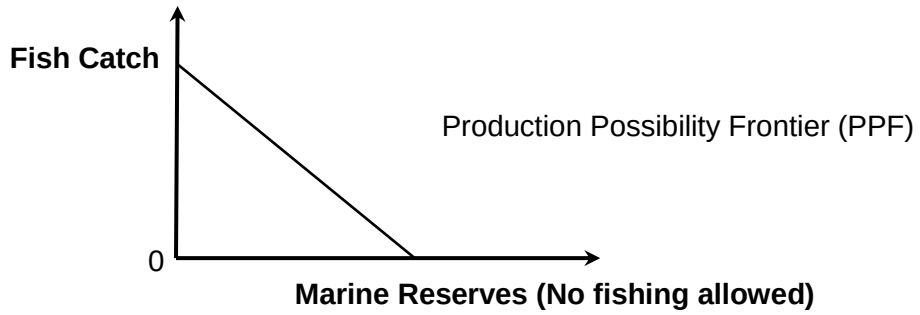
YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION.

SECTION A: SHORT-ANSWER QUESTIONS

Answer **ALL** seven questions in this section.
As a guide, spend no more than **75 minutes** on this section.

QUESTION ONE: Understand the economic problem of scarcity and allocation.

Graph 1: Production Possibilities of an Inshore Island Fishery



Assessor's use only

A1.1a List TWO simplifying assumptions illustrated by the model, **Graph 1**:

i. _____

ii. _____

Basic	Level
Excellent	
Weak	
NR	

A1.1b On **Graph 1**:

i. accurately place an **X** to illustrate the underutilisation of scarce resources

ii. accurately place a **Y** to indicate productive efficiency

Basic	Level
Excellent	
Weak	
NR	

A1.2a With reference to **Graph 1,** explain how the Production Possibility Frontier demonstrates the economic concepts of scarcity and opportunity cost.

_____

_____

_____

_____

_____

_____

_____

_____

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

A1.2b Explain how, over time, more marine reserves may result in an increase in the fish catch – thereby shifting the Production Possibility Frontier outwards and improving economic growth.

_____

_____

_____

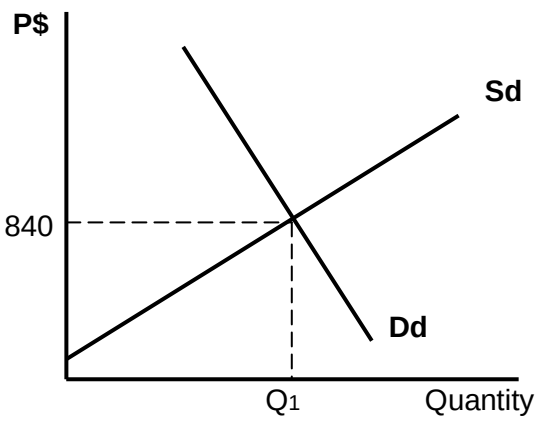
Basic	Level
Excellent	
Weak	
NR	

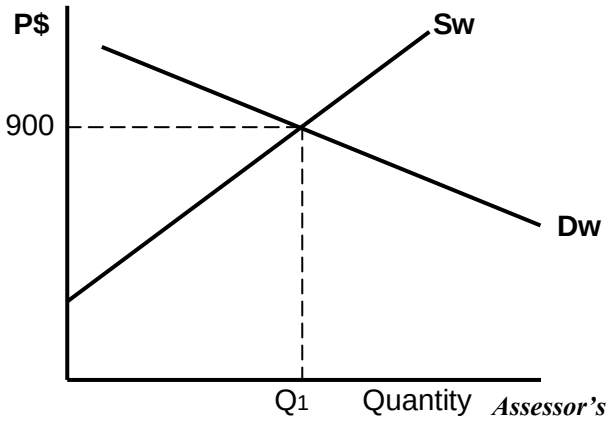
QUESTION TWO: Apply supply and demand analysis to factor and commodity markets.

The graphs below illustrate the market for an internationally traded commodity – copra. Assume that Pasifica's producers are price-takers – where the price is set at auction in the 'World Market'.

Graph 2: Pasifica's Domestic Market for copra **Graph 3: The World Market for copra**

[Price on both Graphs is in US$ per metric tonne]





Assessor's use only

A2.1a

With reference to **Graphs 2** and **3:**

i. Without international trade, by how much is the world price greater than the domestic price?

$US _____

ii. Assuming free trade is now introduced between Pasifica and the rest of the world, state what will happen to the price in the Pasifica market.

_____

Basic	Level
Excellent	
Weak	
NR	

A2.1b

On **Graph 2** (Pasifica) clearly illustrate the price (label **Pw**) after free trade is introduced AND the Quantity of copra exports (bracket and label **X**).

Basic	Level
Excellent	
Weak	
NR	

A2.2a

Analyse **Graph 2** and explain the effects of free trade being introduced to Pasifica. In particular, explain who is better off and who is worse off by referring to:

- Pasifica's buyers of copra and buyer (consumer) surplus
- Pasifica's producers (including exporters) of copra and producer surplus
- Pasifica's government

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Advanced	Level
Excellent	
Moderate	
Low	
Weak	
NR	
Exceed	

QUESTION THREE: Define and calculate price, income and cross elasticity of demand and show their applications.

Assessor's use only

A3.1a	Use the midpoint method to calculate the income elasticity of demand (YED) co-efficient for smart phones when an increase in average weekly disposable income from $400 to $600 results in an increase in quantity demanded in the market from 20 to 60 phones. Show your workings in the box below. **YED** =_____	**Basic** / **Level** Excellent Weak NR
A3.1b	Use your calculation in 2 (a) to **explain** whether smart phones should be classified as luxury, normal or inferior goods.	**Basic** / **Level** Excellent Weak NR
A3.2a	Suggest why the manager of a supermarket might be interested in the YED of the goods in stock.	**Basic** / **Level** Excellent Weak NR
A3.3a	A product like bread is considered to be income **inelastic** whereas a product like a smart phone is likely to be income **elastic**. Using the concept of elasticity, explain why this might be so.	**Proficient** / **Level** Excellent Moderate Weak NR

QUESTION 4: Derive an upward-sloping supply curve for an individual perfectly competitive firm and for the market supply curve. Identify the shut-down point and the break-even point.

Assessor's use only

A4.1a **Distinguish** between accounting costs and economic costs.

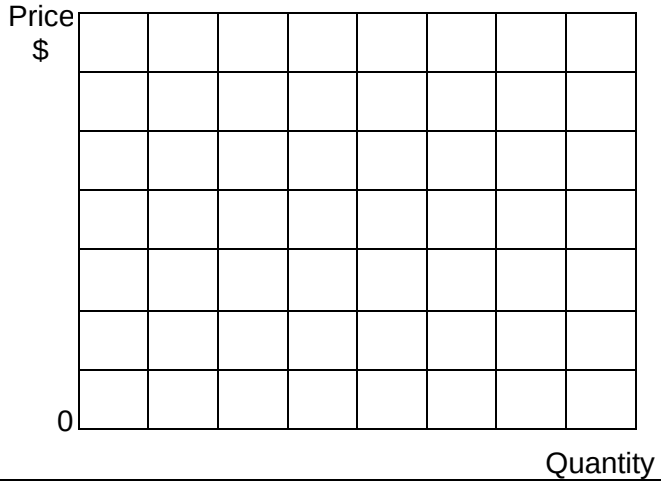
Basic	Level
Excellent	
Weak	
NR	

A4.2a Using relevant data from **Table 1**, **derive** (plot) on **Graph 4** the upward-sloping **Supply Curve** for an individual perfectly competitive firm. Scale and label your graph appropriately.

Table 1

Costs $			
MC	**AC**	**AVC**	**Output**
10	50	25	30
20	45	20	40
30	42	23	45
40	40	27	50
50	42	30	55
60	45	33	60

Graph 4: Individual Supply Curve for a perfectly competitive firm



Basic	Level
Excellent	
Weak	
NR	

A4.3a From **Table 2**, identify:

i. The level of output at the **Shutdown** point: Q _____

ii. The **Breakeven** price: $ _____

Basic	Level
Excellent	
Weak	
NR	

A4.4a Explain how increasing marginal costs of production - associated with the Law of Diminishing Returns –result in the upward or positive slope of the firm's supply curve in **Graph 4**.

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

QUESTIONFIVE: Describe the nature of positive and negative externalities of production, and how they relate to resource allocation in the market.

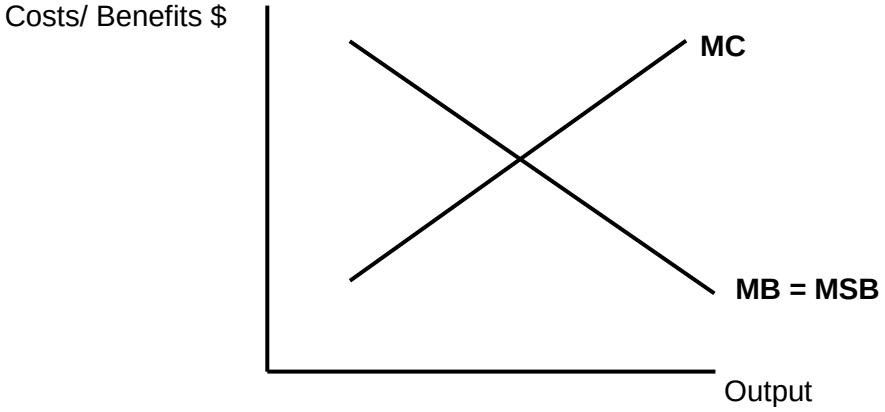
Assessor's use only

A5.1a Using an **example,** describe a positive externality of production.

Basic	Level
Excellent	
Weak	
NR	

A5.2a

Graph 5: Positive Externalities of Production



A5.2b

Basic	Level
Excellent	
Weak	
NR	

On **Graph 5** clearly:

i. Locate and label the private market equilibrium price (**P_{ME}**) and private market output (**Q_{ME}**)
ii. Place a marginal social cost curve (label **MSC)** that indicates the existence of positive externalities from the production of this good
iii. Label the social equilibrium price (**P_{SE}**) and social output level (**Q_{SE}**)
iv. Shade the area of deadweight loss (DWL) at the private output level (QME)

Basic	Level
Excellent	
Weak	
NR	

A5.3a Explain why a deadweight loss (DWL) occurs at the private market equilibrium in **Graph 5**.

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

QUESTION SIX: Explain why the free market solution is not always equitable, and show how governments may intervene for greater equity at the cost of efficiency.

Assessor's use only

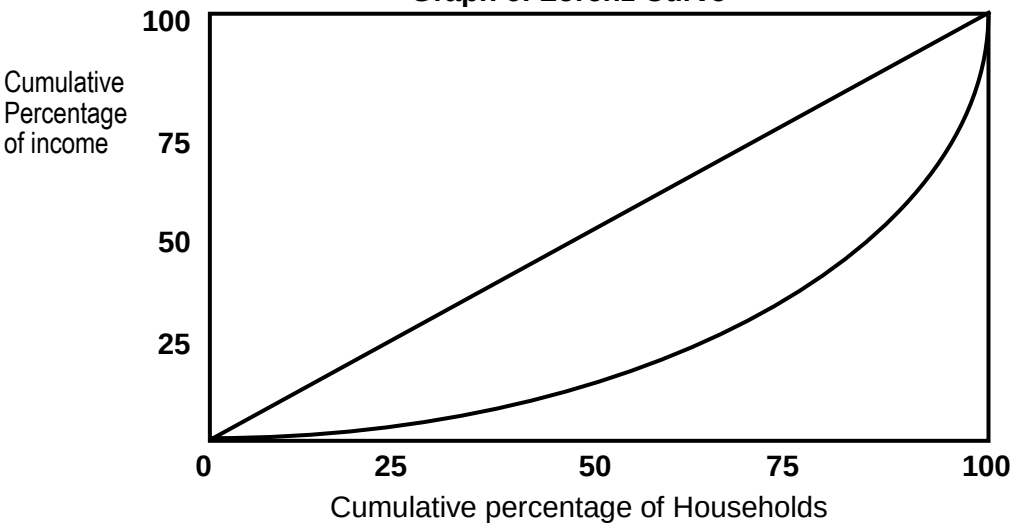
A6.1a

By referring to the earning of income, distinguish between the concepts of **equity** and **equality**.

Basic	Level
Excellent	
Weak	
NR	

A6.2a

Graph 6: Lorenz Curve



Referring to **Graph 6**:

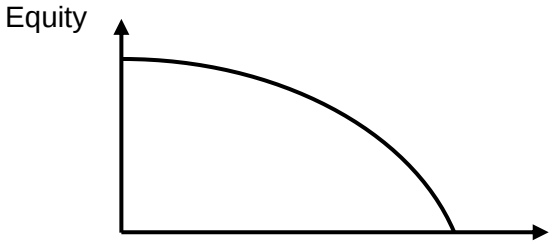
i. state the approximate percentage income that is shared by 75% of households. _____%

ii. sketch a new Lorenz curve to show a more equal income distribution (Label **L1**).

Basic	Level
Excellent	
Weak	
NR	

A6.3a

Graph 7: Equity versus Efficiency Trade-off



Explain the theoretical trade-off that **Graph 7** is demonstrating and discuss whether this trade-off should necessarily occur in the 'real world'.

Advanced	Level
Excellent	
Moderate	
Low	
Weak	
NR	
Exceed	

QUESTION SEVEN: Demonstrate an understanding of external influences that affect the economic activity of a country in the South Pacific region.

Assessor's use only

A7.1a

Distinguish between the Balance of Payments on **Current** Account and Balance of Payments on **Financial** (Capital) Account

Basic	Level
Excellent	
Weak	
NR	

A7.2a

Table 2: Selected International Transactions

	Transaction	$ millions
A	Vehicle imports	1000
B	Foreign aid given for tsunami relief to a Pacific neighbour	10
C	Interest received from bank investments in foreign country	100
D	Exports of timber and fish	800
E	Dividends paid to foreign owned companies	350
F	Premiums paid to insurance companies in other countries	60
G	Immigrants deposit their savings in domestic banks	40
H	Receipts from tourism	200

Using the capital letters in the left-hand column in **Table 2**, identify:

i. a **Balance of Goods** receipt Letter_____

ii. an **Investment Income** payment Letter_____

iii. a **Balance of Services** payment Letter_____

Basic	Level
Excellent	
Weak	
NR	

A7.3a

Define the term 'Exchange Rate' and explain the impact of exchange rate changes on international trade in goods and services.

Advanced	Level
Excellent	
Moderate	
Low	
Weak	
NR	
Exceed	

SECTION B: ECONOMIC ANALYSIS

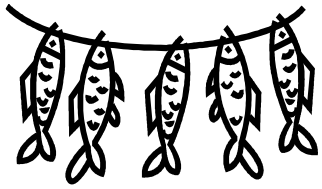
Answer **BOTH** questions in this section. Be brief and to the point in your answers. As a guide, spend no more than**75 minutes** on this section.

MICROECONOMIC ANALYSIS

QUESTION EIGHT: Compare and contrast the firm's behaviour in a monopolistic market with that in a perfectly competitive market.

Fishing has always been important to Pacific Islanders- initially for nutrition and trade, but in recent times the development of 'fishing industries' has also provided employment, export revenue and government revenue for many Pacific Island economies. Approximately 10% of GDP, on average, is based on the commercial fishing industries of Pacific Island economies. Pacific Island "fishing" includes the following six categories: coastal commercial; coastal subsistence; offshore locally based; offshore foreign-based; freshwater; aquaculture.

Adapted from: Gillett, Robert; 2009; Fisheries in the Economies of the Pacific Island Countries and Territories; (for the Asian Development Bank).



The following questions will simplify the 'fishing industry' to only include coastal commercial fishing, and will analyse the economics of this fishing being carried out by perfectly competitive firms compared with a monopolistic firm.

Assessor's use only

B8.1a Define the following terms:

(i) Marginal Revenue _____

_____

_____

_____

(ii) Average Revenue _____

_____

_____

_____

Basic	Level
Excellent	
Weak	
NR	

Basic	Level
Excellent	
Weak	
NR	

B8.1b Calculate and enter the correct figures in the spaces in **Table 3.**

Table 3: Revenues of a Firm

	Price ($)	Quantity (Tonnes)	Total revenue	Average revenue	Marginal revenue
(i)	60	1			60
	40	2	80		
(ii)	20	3		20	

Basic	Level
Excellent	
Weak	
NR	

Basic	Level
Excellent	
Weak	
NR	

Assessor's use only

B8.1c

Use TWO pieces of evidence in **Table 3** to explain whether this firm is a monopoly OR perfectly competitive.

The Firm is: _____ because:

i. _____

_____

_____

ii. _____

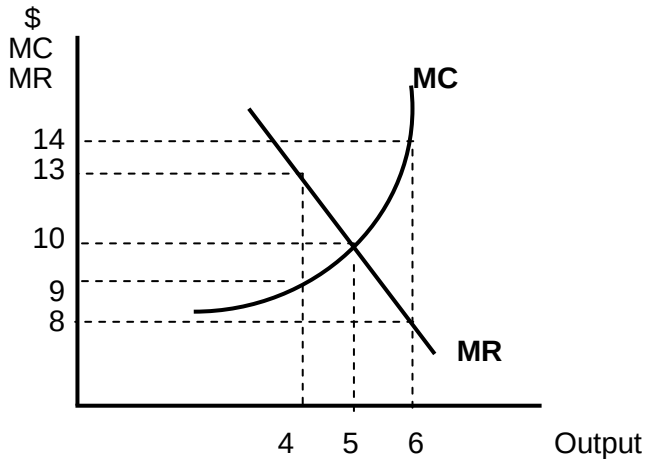
_____

_____

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

B8.2a

Graph 8: Profit Maximisation Output Level for a Monopoly Fishing Firm



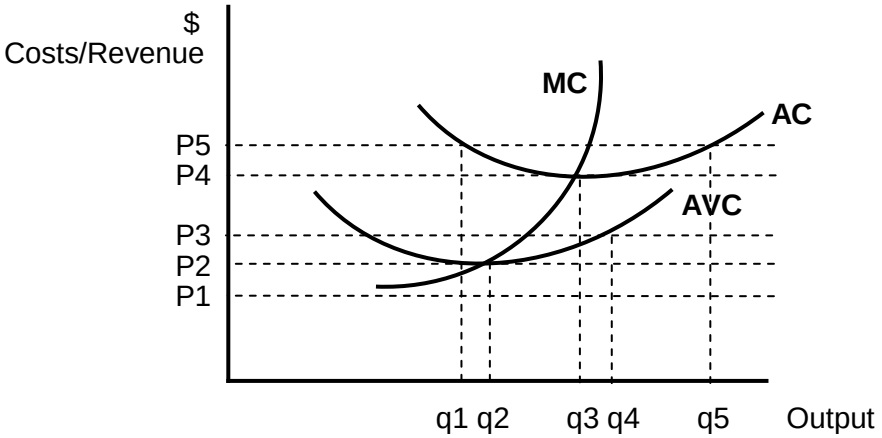
Using marginal analysis and the figures in **Graph 8**, fully explain why this profit maximising monopoly will choose to produce 5 units of output.

Advanced	Level
Excellent	
Moderate	
Low	
Weak	
NR	
Exceed	

Assessor's use only

B8.2b

Graph 9: A Perfectly Competitive Fishing Firm



With reference to **Graph 9**:

i. At what price (P1,2,3,4,5) is the firm making super-normal profits? _____

ii. At what price (P1,2,3,4,5) is the firm able to survive making sub-normal profits (losses) in the short-run? _____

Basic	Level
Excellent	
Weak	
NR	

B8.2c

What is the key difference between a monopolistic and a perfectly competitive **industry**?

_____

_____

_____

_____

_____

_____

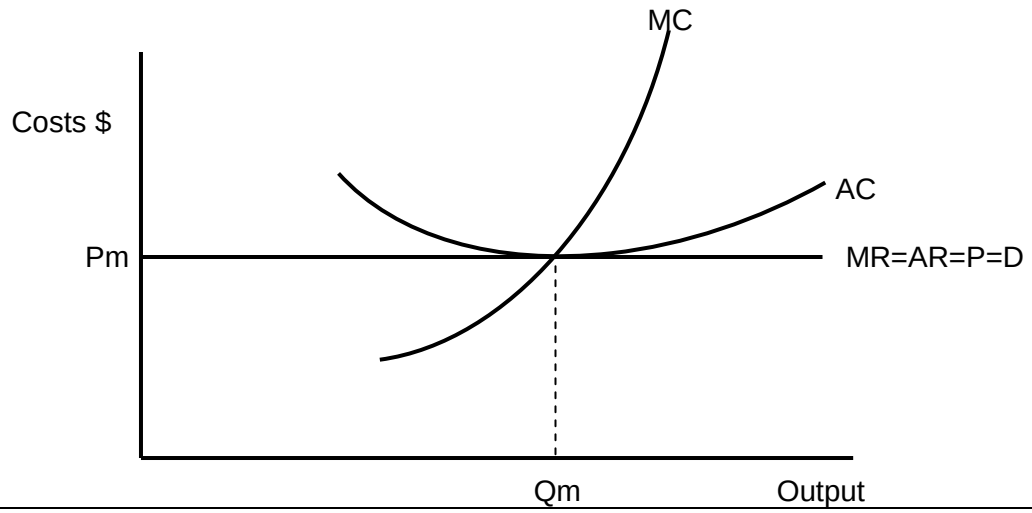
Basic	Level
Excellent	
Weak	
NR	

B8.2d

The rising cost of fuel is a major problem that is hurting the profitability of small scale fishing boat firms in the South Pacific.

On **Graph 10**, illustrate how increasing fuel costs affect the firm's marginal and average cost curves **(label MC_1 and AC_1)** and show the new profit maximising level of output (**label Qm_1**).

Graph 10: Costs of the Fishing Firm



Proficient	Level
Excellent	
Moderate	
Weak	
NR	

Assessor's use only

B8.2e	**Explain** the 'profitability problem' that the rising fuel costs will cause at output level **Qm_1** on **Graph 10** for this perfectly competitive firm.	

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

MACROECONOMIC ANALYSIS

QUESTION NINE: Demonstrate an understanding of economic activity in terms of the circular flow of income and spending.

As general economic performance (economic growth) improves in many of the countries surrounding South Pacific nations- such as New Zealand, Australia, the United States of America and many East Asian economies, the South Pacific economies will benefit from increasing demand for certain resources such as copra, and services such as tourism. Spending on tourism earns approximately 10% of GDP for the average South Pacific economy and this is forecast to increase further as the economic recovery continues in the Pacific Basin economies.

B9.1a	Define **Gross Domestic Product (GDP)**	

Basic	Level
Excellent	
Weak	
NR	

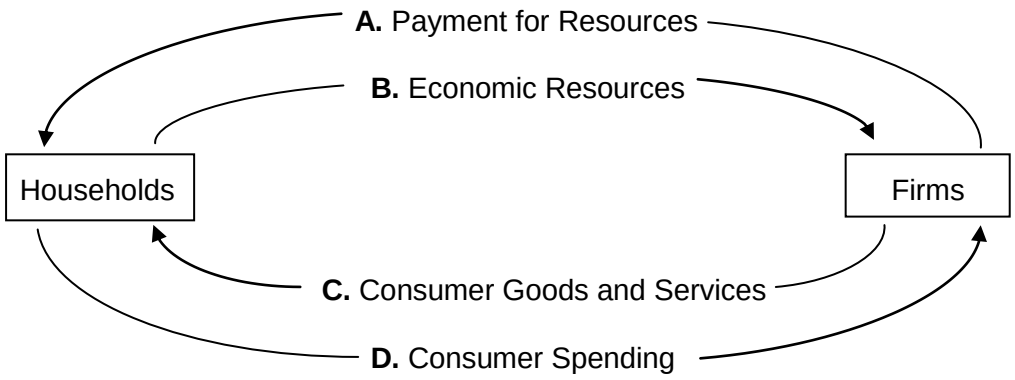
B9.1b	Distinguish between **real** and **nominal** GDP and explain why **real** figures are preferred by economists when measuring economic growth.	

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

Assessor's use only

B9.1c

Diagram 1: A Simple Circular Flow



Basic	Level
Excellent	
Weak	
NR	

In **Diagram 1** which of the four flows represents:

(i) the **Expenditure** measure of GDP? Letter _____

the **Income** measure of GDP? Letter _____

(ii) **Real** flows: Letters _____ and _____

Basic	Level
Excellent	
Weak	
NR	

B9.1d

Use the **six** relevant National Accounting figures in **Table 4** to calculate GDP using the **expenditure** method**.** Show your calculations in the Workings Box below.

Table 4: Pasifica's National Income Statistics

Indirect taxes **$20m**	Final consumption expenditure: Government **$30m**
Exports of goods and services **$60m**	Final consumption expenditure: Private **$80m**
Gross Operating Surplus **$70m**	Gross Fixed Capital Formation **$40m**
Imports of goods and services **$65m**	Change in Inventories **$5m**

Workings Box:

GDP = C + I +△ R + G + (X – M)

____ + ____ + ____ + ____ + (____ – ____)

= **GDP $M** _____

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

B9.1e

The letters below represent the components of aggregate demand (**AD**) in a typical country's System of National Accounts. State specifically what each letter stands for:

(i) **C** _____

I _____

(ii) **G** _____

X _____

M _____

Basic	Level
Excellent	
Weak	
NR	

Basic	Level
Excellent	
Weak	
NR	

		Assessor's use only
B9.1f	(i) Explain which of the components of AD in (e) above will be **directly** affected by the increase in international tourism into South Pacific economies? (ii) Explain how another component of AD above might be positively affected **indirectly** (a flow-on or multiplier effect) from your answer to B9.1f.	**Basic** / **Level** Excellent Weak NR **Basic** / **Level** Excellent Weak NR
B9.1g	Explain how a change in a country's foreign exchange rate may encourage international tourism to that country.	**Basic** / **Level** Excellent Weak NR

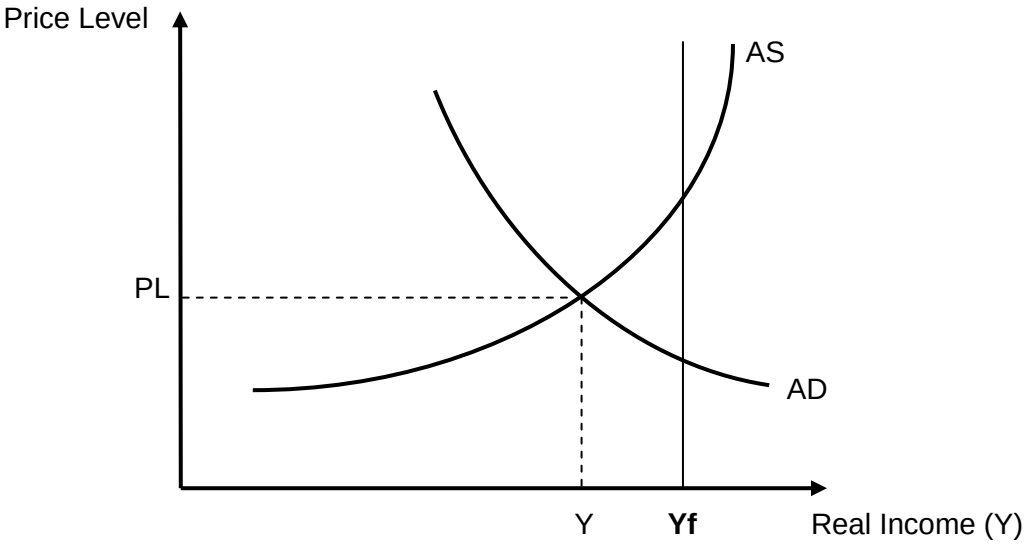
QUESTION TEN: Demonstrate an understanding of the impact of fiscal policy.

B10.1a	Define **fiscal Policy**.	**Basic** / **Level** Excellent Weak NR
B10.1b	Describe a specific fiscal policy measure that a South Pacific government could introduce to help boost tourism in the country.	**Basic** / **Level** Excellent Weak NR
B10.1c	Apart from raising income tax rates, describe one way that a government could avoid a 'budget blowout' (a large budget deficit), caused by their expansionary tourism plan in 10.1b.	**Basic** / **Level** Excellent Weak NR

Assessor's use only

B10.1d

Graph 11: The AD / AS Model



i. Illustrate on **Graph 11** the result of increased fiscal spending to boost tourism and the effects of this change on the price level and real income.

ii. Briefly explain why you made the change that you did on **Graph 11**.

Proficient	Level
Excellent	
Moderate	
Weak	
NR	

B10.1e

As a result of the fiscal stimulus to boost tourism, inflationary pressures may increase in the economy. In paragraphs, discuss the following points:

- the meaning of the term 'monetary policy'
- changes that may need to be made to monetary policy settings to reduce the inflation rate
- macro-economic disadvantages that may result from this change in monetary policy settings.

Refer to **Graph 11** in your answer.

Assessor's use only

B10.1e cont.

Advanced	Level
Excellent	
Moderate	
Low	
Weak	
NR	
Exceed	

THE END