Tonga National Form Seven Certificate

ECONOMICS

2016

QUESTION and ANSWER BOOKLET

Time allowed: Three Hours

INSTRUCTIONS

1. Write your Student Enrolment Number (SEN) on the top right hand corner of this booklet.
2. Answer ALL QUESTIONS. Write your answers in the spaces provided in this booklet.
3. If you need more space for answers, ask the Supervisor for extra paper. Write your SEN on all extra sheets used and clearly number the questions. Attach the extra sheets at the appropriate places in this booklet.

<table>
<thead>
<tr>
<th>TOPICS</th>
<th>Pages</th>
<th>Time (mins)</th>
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<tbody>
<tr>
<td><strong>SECTION A</strong> Resource allocation via the market system</td>
<td>2-7</td>
<td>81</td>
<td>30</td>
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<tr>
<td><strong>SECTION B</strong> Resource allocation via the public sector</td>
<td>8-10</td>
<td>36</td>
<td>20</td>
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<td><strong>SECTION C</strong> Aggregate economic activity and policy</td>
<td>11-15</td>
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<td><strong>TOTAL</strong></td>
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Check that this booklet contains pages 2 - 15 in the correct order

YOU MUST HAND THIS BOOKLET TO THE SUPERVISOR AT THE END OF THE EXAMINATION
SECTION A: RESOURCE ALLOCATION VIA THE MARKET SYSTEM

Question 1
Define Marginal Utility

Question 2
Define Short-Run Average Total Costs.

Question 3
Describe the Law of Diminishing Returns.

Question 4
Give TWO (2) examples of Economic Models.
Question 5

Describe the Production Possibilities Schedule.

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Question 6

Describe the effect on the supply curve, price and equilibrium quantity of beef if government subsidize beef production (ceteris paribus).

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Question 7

With the help of the **GRAPH A**, explain the relationship between Short-Run Average Fixed Cost, Short-Run Average Variable Cost, Marginal Cost, and Average Total Cost.

![GRAPH A](image)

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Use **Graph B** to answer **Question 8**.

**Question 8**

**ELASTICITY OF DEMAND AND INCIDENCE OF SALES TAX**

**Graph B** illustrates the impact of sales tax on a commodity with relatively Inelastic demand.

Analyse the incidence of the sales tax illustrated in the graph.

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Use **GRAPH C** to answer **Question 9**.

**Question 9**

With the concepts of Real Wages and Supply/Demand Analysis, explain the effects of the Price Level Changes and Controls in the Labour Market illustrated by the **GRAPH C**.

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**Question 10**

Suppose Saane’s cafee sells potato chips and fried fish. The following elasticity were calculated:

- the price elasticity of demand for potato chips is 1.8;
- the cross price elasticity of demand of potato chips for fried fish is -1.5; and
- the income elasticity of demand for potato chips is 1.2.

Use the information above to explain the significance of each type of elasticity of demand calculated to Saane’s Pricing Decision Makings.

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**Question 11**

Discuss the applications of Opportunity Costs in everyday living.

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**Skill level 4**

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Question 12

Sabrina Vilovilo is a Restaurant in Nuku‘alofa that sells BBQ and food dishes which are very similar to many of its competitors.

Explain the significance of Product Differentiation to the successful operation of Sabrina Vilovilo with reference to differentiation by style, by quality, and by location.

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SECTION B: RESOURCE ALLOCATION VIA THE PUBLIC SECTOR

Question 1

Define property rights.

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Question 2

A Registered tax allotment in Tonga gives the landowner the rights to that property. Explain the significance of Property Rights to land owners.

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Question 3

Give TWO (2) local examples of goods with Negative Externalities of Consumption.

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**Question 4**

Give TWO (2) examples of Market Failure.

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**Question 5**

Give TWO (2) local examples of services with Positive Externalities of Consumption.

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**Question 6**

*Imposing tax, charging or fines, regulations, and providing subsidies* are ways in which the Tongan government intervene in the operation of the market system.

Discuss the effectiveness of implementing the Government Intervention.

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Question 7

Define a 45 degree line Lorenz Curve.

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Question 8

Give TWO (2) local examples of a Natural Monopoly.

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Use GRAPH D to answer Question 9.

Question 9

On GRAPH D above, derive a Social Marginal Cost (MSC) Curve to include the pollution from racing cars on the main road. Clearly indicate the followings on the graph:

a. Market equilibrium – Price as \( P_m \) and Quantity as \( Q_m \).

b. Social equilibrium - Price as \( P_s \) and Quantity as \( Q_s \).
SECTION C: AGGREGATE ECONOMIC ACTIVITY AND POLICY

20 SKILL LEVEL

Question 1
Define Money Supply, M1.

Question 2
In terms of GDP, state the best measure of Economic Growth.

Question 3
There are three Accounts in a Balance of payments, namely Current, Capital and Financial Accounts. Describe the Capital Account.

Question 4
Name the major components of Tonga Government Budget.
**Question 5**

Define **Injections** as it is used in the economics circular flow model.

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**Question 6**

With reference to the 5-Sector Flow model, give **TWO** (2) examples of Withdrawals.

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**Question 7**

The table below contains the Terms of Trade for Tongaland. Use the information in the table to describe the general movement in the terms of trade for Tongaland over the seven year period.

<table>
<thead>
<tr>
<th>Tongaland’s Terms of Trade (2003 = 100)</th>
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<tbody>
<tr>
<td>2004</td>
</tr>
<tr>
<td>2005</td>
</tr>
<tr>
<td>2006</td>
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<td>2007</td>
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<td>2008</td>
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<td>2009</td>
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<td>2010</td>
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Question 8
Differentiate between a model of a closed economy and an open economy.
**Question 9**

The following data is based on the Fiscal Year period 2006/2007 to 2015/16 taken from the Tonga Government Budget.

Use the data and your own knowledge to evaluate the trends over the ten year period.

<table>
<thead>
<tr>
<th></th>
<th>06/07 T$m</th>
<th>07/08 T$m</th>
<th>08/09 T$m</th>
<th>09/10 T$m</th>
<th>10/11 T$m</th>
<th>11/12 T$m</th>
<th>12/13 T$m</th>
<th>13/14 T$m</th>
<th>14/15 T$m</th>
<th>15/16 T$m</th>
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<tbody>
<tr>
<td>Maintenance &amp; Operations</td>
<td>5.88</td>
<td>6.07</td>
<td>12.29</td>
<td>6.05</td>
<td>6.11</td>
<td>7.49</td>
<td>15.43</td>
<td>28.44</td>
<td>20.34</td>
<td>45.9</td>
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<tr>
<td>Government of Tonga funding</td>
<td>158.29</td>
<td>152.63</td>
<td>198.77</td>
<td>156.38</td>
<td>140.08</td>
<td>142.27</td>
<td>161.59</td>
<td>185.21</td>
<td>183.09</td>
<td>228.54</td>
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<tr>
<td><strong>TOTAL BUDGET</strong></td>
<td><strong>232.35</strong></td>
<td><strong>281.82</strong></td>
<td><strong>265.64</strong></td>
<td><strong>238.01</strong></td>
<td><strong>285.63</strong></td>
<td><strong>298.59</strong></td>
<td><strong>273.65</strong></td>
<td><strong>304.52</strong></td>
<td><strong>365.73</strong></td>
<td><strong>496.32</strong></td>
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**Other Information:**

1. All amounts are rounded to two decimal places.
2. All values are revised amount except for 2007/2008, and 2015/2016, which are the estimated amount.
3. Debt Management and Maintenance & Operations are two categories of Government Expenditure.
4. Government of Tonga Funding is a Category of Sources of Funds.
5. Other Sources of Funds include Overseas Donor Funding (Cash & In kind), Local Community Contribution (Cash), Revolving Fund, Tonga Trust, Budget Support from Overseas Donor.
Question 10

Use Graph E to answer the following questions.

Indicate the equilibrium level of aggregate output and label as $Y_e$.
Indicate the Inflationary gap with a double arrow and calculate the inflationary gap.

Graph E: FULL EMPLOYMENT

Expenditure ($million)  full employment  Y

Real GDP ($millions)

12  45°

0  5  9  10  12

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