READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This paper consists of THREE sections.

2. There are TWO questions in each section. Candidates MUST answer THREE questions, ONE from EACH section.

3. Answers for ALL questions must be written in the answer booklet provided.

4. Begin EACH question on a separate page.

5. Candidates may use silent, non-programmable calculators.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.
SECTION I

Answer ONE question from this section.

Draw ALL diagrams neatly and carefully and clearly label ALL axes and curves.

1. A consumer is consuming a combination of Good X and Good Y at equilibrium A. The price of Good X falls. The consumer therefore moves to another equilibrium, B.

(a) (i) a) Define the terms ‘indifference curve’ and ‘budget line’. [2 marks]

b) Draw a diagram showing an indifference curve and a budget line, and use the diagram to explain consumer equilibrium. [8 marks]

(ii) Using the diagram in (a) (i) b) above, explain how a decrease in the price of Good X moves the consumer to equilibrium B. [5 marks]

(b) (i) The change from equilibrium A to equilibrium B is the total change.

Explain what is meant by EACH of the following terms:

a) ‘Substitution effect’ [2 marks]

b) ‘Income effect’ [2 marks]

(ii) With the aid of a diagram, explain the income and substitution effects using EITHER the Hicksian approach OR the Slutskian approach. [6 marks]

Total 25 marks
2. A perfectly competitive firm producing microchips has recorded its fixed cost as $128. Its output levels and variable costs are shown in the table below.

<table>
<thead>
<tr>
<th>Output Level</th>
<th>Variable Cost $</th>
<th>Total Cost $</th>
<th>Marginal Cost $</th>
<th>Average Fixed Cost $</th>
<th>Average Total Cost $</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>128</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>1</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>90</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>116</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) (i) Write the formula for EACH of the following costs:

   a) Total cost  
   b) Marginal cost  
   c) Average fixed cost  
   d) Average total cost  
   e) Variable cost

   [5 marks]

(ii) Copy and complete the table to show the FOUR costs for EACH level of output.  

   [8 marks]

(b) With the aid of a diagram, explain the relationship between the ‘marginal cost’ and the ‘average total cost’.  

   [6 marks]

(c) With the aid of a diagram, explain the relationship among the ‘marginal cost curve’, the ‘supply curve’ and the ‘average variable cost curve’.  

   [6 marks]

Total 25 marks
SECTION II

Answer ONE question from this section.

3.  (a) (i) State the difference between 'normal profit' and 'positive economic profit' (abnormal profit).

(ii) Explain the concept of 'market structure'.

(b) Use the following characteristics to distinguish among the FOUR MAJOR market structures: (A table may be a helpful device in organizing your response.)

(i) The number of firms in the industry

(ii) The product

(iii) Barriers to entry

(iv) Control over price

(c) An industry comprises 10 firms which recorded the following sales:

ABC Corporation $1 650
FBN Corporation $1 400
ATT Corporation $1 350
GNC Corporation $1 200

The other six firms recorded sales of $500 EACH.

(i) Calculate, for the industry

a) the Four-Firm Concentration Ratio

b) the Herfindahl-Hirschman Index.

(ii) Interpret the TWO measures of industrial concentration in relation to market structures.

Total 25 marks
4. (a) Define EACH of the following concepts:
   (i) ‘Economic efficiency’ [2 marks]
   (ii) ‘Market failure’ [2 marks]

   (b) (i) Distinguish between ‘private benefits’ and ‘social benefits’. [4 marks]
   (ii) Explain how divergence between private benefits and social benefits causes market failure. [1 mark]

   (c) (i) Compare the characteristics of a ‘public good’ with those of a ‘private good’. [4 marks]
   (ii) Explain how a public good may cause market failure. [2 marks]
   (iii) Explain how government may respond to the problem caused by public goods and externalities. [2 marks]

   (d) Draw a diagram to illustrate ‘deadweight loss’ and use the diagram to explain how a monopoly may cause market failure. [8 marks]

   Total 25 marks

SECTION III

Answer ONE question from this section.

5. (a) (i) Identify TWO factors of production and their rewards. [2 marks]
   (ii) Explain why the demand for a factor of production is a derived demand. [2 marks]

   (b) (i) Outline the ‘marginal productivity theory’. [2 marks]
   (ii) Explain how the marginal productivity theory is related to the demand for labour. [3 marks]

   (c) (i) With the aid of a diagram, distinguish between ‘transfer earnings’ and ‘rent’. [6 marks]
   (ii) Assuming that the supply curve of the factor is vertical, state the values of rent and transfer earnings. [2 marks]

   (d) Discuss the effect of a monopsony on the labour market. [4 marks]

   (e) A computer has a two-year life span and generates marginal revenue product (MRP) of $3 000 at the end of the first and second years of its life. The interest rate is 5%.

   Apply the marginal productivity theory of the demand for capital to determine the highest price that should be paid for the computer. [4 marks]

   Total 25 marks
6.  (a)  
(i) Define the term 'wage differentials'.  
(ii) Outline TWO factors that give rise to wage differentials.  

(b) With the aid of a diagram, compare the level of wages in EACH of the following situations:

(i) When the buyer has monopoly power in the production market  
(ii) When there is perfect competition in the labour market  

(c)  
(i) Explain TWO types of labour mobility.  
(ii) The CARICOM Single Market and Economy (CSME) permits labour mobility among CARICOM member states. Discuss the expected effect of this mobility on the labour market of CARICOM member states.  

Total 25 marks

END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.