



CARIBBEAN EXAMINATIONS COUNCIL

# CAPE® Economics

**SYLLABUS  
SPECIMEN PAPER  
MARK SCHEME  
SUBJECT REPORTS**

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## **Economics**

Economics is the study of how society provides for itself by making the most efficient use of scarce resources so that both private and social welfare may be improved. The CAPE Economics Syllabus is intended to promote knowledge and understanding of the principles and concepts of economics and to foster an appreciation of the various methods used by economists in analysing economic problems. The knowledge and skills acquired will enable students to contribute to the economic and social development of the Caribbean.

The syllabus is arranged into two Units. Each Unit consists of three Modules.

### **UNIT 1: MICROECONOMICS**

- Module 1 – Methodology: Demand and Supply
- Module 2 – Market Structure, Market Failure and Intervention
- Module 3 – Distribution Theory

### **UNIT 2: MACROECONOMICS**

- Module 1 – Models of the Macroeconomy
- Module 2 – Macroeconomic Problems and Policies
- Module 3 – Growth, Sustainable Development and Global Relations



**CARIBBEAN EXAMINATIONS COUNCIL**

**Caribbean Advanced Proficiency Examination  
CAPE<sup>®</sup>**

# **ECONOMICS SYLLABUS**

**Effective for examinations from May/June 2010**

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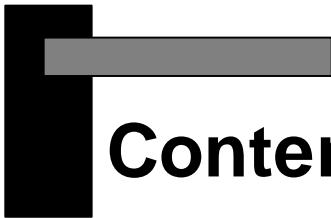
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| CXC A20/U2/09



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**Please note that the syllabus was revised and amendments are indicated by italics.**

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**Please check the website [www.cxc.org](http://www.cxc.org) for updates on CXC's syllabuses.**



**CXC A20/U2/09**



# Introduction

The Caribbean Advanced Proficiency Examination (CAPE) is designed to provide certification of the academic, vocational and technical achievement of students in the Caribbean who, having completed a minimum of five years of secondary education, wish to further their studies. The examinations address the skills and knowledge acquired by students under a flexible and articulated system where subjects are organised in 1-Unit or 2-Unit courses with each Unit containing three Modules. Subjects examined under CAPE may be studied concurrently or singly.

*The Caribbean Examinations Council offers three types of certification. The first is the award of a certificate showing each CAPE Unit completed. The second is the CAPE diploma, awarded to candidates who have satisfactorily completed at least six Units, including Caribbean Studies. The third is the CAPE Associate Degree, awarded for the satisfactory completion of a prescribed cluster of seven CAPE Units including Caribbean Studies and Communication Studies. For the CAPE diploma and the CAPE Associate Degree, candidates must complete the cluster of required Units within a maximum period of five years.*

*Recognised educational institutions presenting candidates for CAPE Associate Degree in one of the nine categories must, on registering these candidates at the start of the qualifying year, have them confirm in the required form, the Associate Degree they wish to be awarded. Candidates will not be awarded any possible alternatives for which they did not apply.*



# Economics Syllabus

## ◆ RATIONALE

Economics is the study of how society provides for itself by making the most efficient use of scarce resources so that both private and social welfare may be improved. The subject, therefore, covers the study of *individuals*, households, firms, government and international economic institutions as they attempt to make better use of scarce resources.

The study of Economics enables individuals to develop a better understanding of the economic issues which affect them and the world in which they live. It will also enable students to offer informed comments on economic matters. The knowledge gained from this course in Economics will be of lifelong value to the student. The influence of the subject on all areas of activity should stimulate the individual to continue reading and *conducting research* in Economics. It is recognised that persons doing this course may be drawn from different backgrounds and may possess different interests. Some may wish to study Economics as preparation for further specialisation in the subject. Others may study the subject to complement other subject disciplines, *such as*, careers in finance, accounting or law. Some students may see the subject as one worthy of study in its own right. Students of Economics will be able to contribute, significantly, to economic and social development in the Caribbean and the wider world by acting as catalysts for wider awareness of social and economic issues.

A study of Economics at the CAPE level will be of benefit to all students by introducing them to the philosophy which underlies everyday economic interactions. The study will also train the student to think logically, critically and impartially on a variety of contentious issues.

## ◆ AIMS

The syllabus aims to:

1. promote understanding of the basic principles and concepts of economics which are accepted in large measure by economists while recognising that the field is changing continuously;
2. develop an appreciation of the various methods used by economists in analysing economic problems;
3. develop an understanding of the global economy and of the relationships between rich and poor nations with respect to international trade and finance and the most important international financial institutions;
4. encourage students to apply economic principles, theories and tools to everyday economic problems, for example, inflation, unemployment, environmental degradation, *sustainable development* and exchange rate instability and to contribute meaningfully to any dialogue on these issues;
5. encourage students to apply economic theory to the critical issues which affect the small open Caribbean-type economy;
6. encourage students to evaluate contentious economic issues so that decision-making may be informed by logical *and critical thinking*;
7. *sensitise students to the need for ethical behaviour in the conduct of economic transactions.*

## ◆ SKILLS AND ABILITIES TO BE ASSESSED

The assessment will test candidates' skills and abilities to:

1. **identify and explain** economic theories, principles, concepts and methods;
2. **interpret, analyse and solve** economic problems using economic models and concepts;
3. **develop** structural and reasoned expositions and evaluate economic theories and policies.

## ◆ PRE-REQUISITES OF THE SYLLABUS

*Successful participation in this course of study will be enhanced by the possession of good verbal and written communications skills. A good foundation in Mathematics would be an asset to students doing this course.*

## ◆ STRUCTURE OF THE SYLLABUS

The Syllabus is arranged into two Units. Each Unit consists of three Modules, each Module requiring 50 hours.

### UNIT 1: MICROECONOMICS

- |          |   |   |
|----------|---|---|
| Module 1 | - | Methodology: Demand and Supply                    |
| Module 2 | - | Market Structure, Market Failure and Intervention |
| Module 3 | - | Distribution Theory                               |

### UNIT 2: MACROECONOMICS

- |          |   |  |
|----------|---|--|
| Module 1 | - | Models of the Macroeconomy                           |
| Module 2 | - | Macroeconomic Problems and Policies                  |
| Module 3 | - | Growth, Sustainable Development and Global Relations |

*Lists of resources are provided in the syllabus. The lists provide information that may be helpful for the study of each Module.*

It is advised that the topics listed in the sections do not necessarily follow sequentially. Teachers may thus introduce certain concepts before others.

It is recognised that Economics may be taught using a strictly qualitative approach or a strictly quantitative approach. However, a proper mix of the two approaches is critical to the understanding of the subject at this level. Teachers are advised, therefore, that proper delivery of the subject would involve the integration of the two approaches.

# ◆ UNIT 1: MICROECONOMICS

## MODULE 1: METHODOLOGY: DEMAND AND SUPPLY

### GENERAL OBJECTIVES

On completion of this Module, students should:

1. appreciate the main problem of economics namely, the allocation of scarce resources and the inevitability of choice;
2. understand the laws, principles and theories governing demand and supply;
3. understand the basic tools of economic analysis.

### SPECIFIC OBJECTIVES

#### TOPIC 1: Central Problem of Economics

Students should be able to:

1. explain the concept of scarcity;
2. apply the concept of opportunity cost in a variety of real-life situations;
3. explain the concept of production possibilities frontier (PPF);
4. use the production possibilities frontier to indicate constant returns, diminishing returns and increasing returns;
5. account for shifts in the production possibilities frontier (PPF);
6. differentiate between positive and normative economics;
7. outline the advantages and disadvantages of the alternative mechanisms by which resources are allocated.

### CONTENT

1. The meaning of scarcity, free goods and economic goods.
2. (a) Definition of opportunity cost.  
(b) Choice: what, how and for whom to produce.

## **UNIT 1**

### **MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

- (c) The concept of opportunity cost applied to economic agents (individuals, households, firms and governments).
- 3. (a) Assumptions: maximum output attainable, given full employment and constant state of technology.
- (b) Regions: attainable, unattainable, efficient and inefficient levels of production.
- 4. Production possibilities frontier: slopes and shapes.
- 5. Use of production possibilities frontier to show growth and technological change.
- 6. Examples of positive and normative statements.
- 7. Different types of economic systems: traditional, market, planned and mixed.

## **SPECIFIC OBJECTIVES**

### **TOPIC 2: Theory of Consumer Demand**

Students should be able to:

- 1. explain the concept of utility;
- 2. explain the law of diminishing marginal utility and the limitation of marginal utility theory;
- 3. explain the meaning of indifference curves and budget lines;
- 4. explain consumer equilibrium using the marginal utility approach;
- 5. explain consumer equilibrium using the indifference curve approach;
- 6. isolate the income and substitution effects of a price change;
- 7. explain effective demand;
- 8. derive the demand curve using both the marginal utility and indifference curve approaches;
- 9. differentiate among normal, inferior and Giffen goods;
- 10. distinguish between shifts of the demand curve and movements along the curve;

## **UNIT 1**

### **MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

11. identify the factors that affect demand;
12. explain the meaning of consumer surplus;
13. explain price elasticity, income elasticity and cross elasticity of demand;
14. calculate numerical values of elasticity;
15. interpret numerical values of elasticity;
16. assess the implications of price elasticity of demand for total spending and revenue;
17. state the factors that determine the price elasticity of demand.

## **CONTENT**

1. Utility: total, marginal, cardinal (marginalist approach), ordinal (indifference curve approach).
2. (a) Explanation of diminishing marginal utility.  
(b) The main assumptions and limitations of Marginal Utility Theory.
3. Indifference curves and the budget constraint (budget lines).
4. The law of equi-marginal returns.
5. The point of tangency of the budget line to the indifference curve.
6. Income and substitution effects of a price change.
7. Effective demand.
8. Deriving the demand curve using the marginal utility as well as the indifference curve approach.
9. Normal, inferior and Giffen goods using the indifference curve approach.
10. Shift versus movements along demand curves.
11. Price and the conditions of demand.
12. Consumer surplus including graphical representations.

## **UNIT 1**

### **MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

13. Price, income, and cross elasticities.
14. Calculation of values of elasticity.
15. Classification and interpretations (sign and size); including the drawings and interpretations of graphs.
16. The implications of price elasticity of demand for total spending and revenue.
17. Factors that determine the price elasticity of demand.

## **SPECIFIC OBJECTIVES**

### **TOPIC 3: Theory of Supply**

Students should be able to:

1. identify the factors of production;
2. explain the term production function;
3. differentiate between the short run and long run;
4. explain the law of diminishing returns;
5. calculate total, average and marginal physical product;
6. explain the relationships among total, average and marginal physical product;
7. identify the stages of production as they relate to total, average and marginal product;
8. calculate total, average, marginal and other costs;
9. explain the relationship among total, average and marginal costs;
10. explain why supply curves are usually positively sloped;
11. explain the concept of producer surplus;
12. explain the shape of the short run and long run supply curves;

## **UNIT 1**

### **MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

13. explain returns to scale and the concepts of economies and diseconomies of scale;
14. distinguish between a movement along the supply curve and a shift in the supply curve;
15. explain the concept of elasticity of supply;
16. calculate elasticity of supply;
17. interpret elasticity of supply.

## **CONTENT**

1. Factors of production: land, labour, capital and entrepreneurship.
2. Relationship between output and input.
3. Fixed and variable factors.
4. The law of diminishing returns.
5. Calculation of total average and marginal physical product. (See suggested teaching and learning activities).
6. Change in the relationship as input increases.
7. Production and its stages, as they relate to the total, average and marginal product including the use of graphs.
8.
  - (a) Fixed cost, variable cost, total cost, marginal cost, average fixed cost, average variable cost, average total cost, sunk costs.
  - (b) The shape of the long run average total cost curve.
  - (c) Productive optimum.
9. The relationship between total, average and marginal cost including the use of graphs.
10. Relationship between quantity supplied and price.
11. Producer surplus including graphical representations.

## **UNIT 1**

### **MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

12. Relationship between marginal cost and the average cost in the short run and long run. Explanation of why the supply curve is the section of the marginal cost curve above the average variable cost and average total cost.
13. (a) Long run and economies of scale.  
(b) Factors determining economies of scale.  
(c) Internal and external economies of scale.  
(d) Diseconomies of scale.
14. Price and the conditions of supply.
15. Concept of elasticity of supply.
16. Calculation of elasticity of supply.
17. Classification and interpretation (size of coefficient) including the drawing and interpretation of graphs.

## **SPECIFIC OBJECTIVES**

### **TOPIC 4: Market Equilibrium**

Students should be able to:

1. explain the concept of the market;
2. explain market equilibrium;
3. calculate equilibrium price and quantity;
4. outline factors that cause changes in equilibrium;
5. evaluate the impact of price controls on market equilibrium;
6. analyse the effects of taxation and subsidies on market equilibrium.

## **UNIT 1**

### **MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

#### **CONTENT**

1. The concept of the market.
2. Equilibrium price, equilibrium quantity.
3. Use of demand and supply data to calculate equilibrium price and quantity.
4. Changes in conditions of supply and demand.
5. The effects of price ceilings and price floors on equilibrium.
6. (a) *The effects of taxation and subsidies on market equilibrium.*  
(b) *The incidence of an indirect tax.*

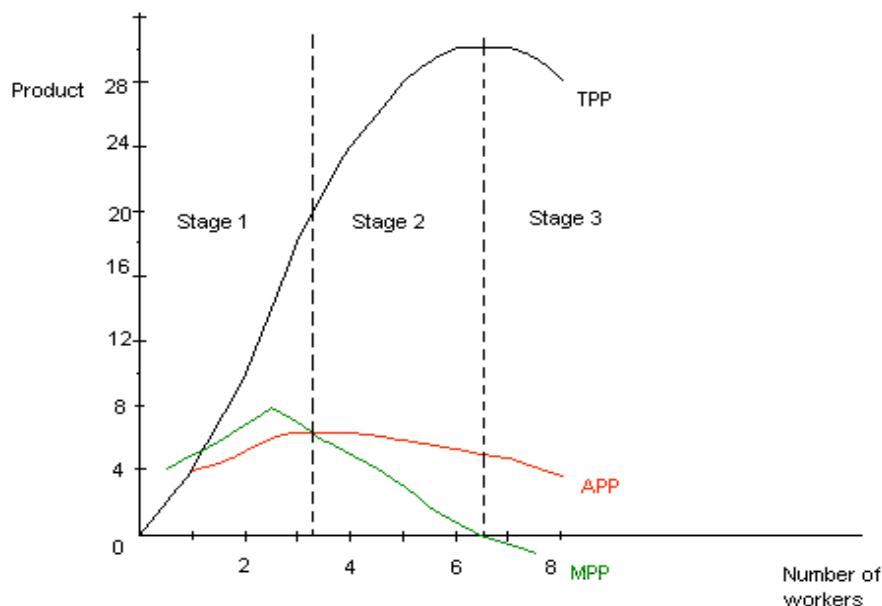
#### **Suggested Teaching and Learning Activities**

*To facilitate students' attainment of the objectives of this Module, teachers are advised to engage students in the teaching and learning activities listed below.*

1. For topic 1, Central Problem of Economics, let students provide examples from personal life, the home, firms and government to demonstrate opportunity cost and the production possibilities frontier (PPF).
2. For topic 2, Theory of Consumer Demand, let students derive their own schedule and plot the demand curve for commodities which they use in their everyday lives.
3. For utility, use water or any other drink to show the different levels of satisfaction (utility). Use the data to derive total and marginal utility curves.
4. For the concept of elasticity, teachers may use two types of materials, one that could change in varying degrees and the other which remains the same regardless of circumstances. Teachers should then apply this concept to market conditions illustrating the concepts of elasticity and inelasticity.
5. For deadweight loss, teachers may use the graphs for consumer and producer surplus to show how market intervention may lead to loss welfare (deadweight loss).
6. For stages of production, allow students to derive the total average and marginal product curves using simulated data. Use the results of the graphs to point out the different stages of production. An example is given below.

**UNIT 1**  
**MODULE 1: METHODOLOGY: DEMAND AND SUPPLY (cont'd)**

GRAPH SHOWING THE STAGES OF PRODUCTION



- (i) Stage 1 occurs up to the point where  $APP_L$  is at its maximum.
- (ii) Stage 2 occurs from the point where  $APP_L$  is at a maximum up to the point where  $MPP_L$  is zero. In this stage new workers add to total physical output.
- (iii) Stage 3 occurs when  $MPP_L$  is negative.

The producer will operate in stage 2. In stage 1 there is insufficient labour being used (up to the point where  $MPP_L$  is at its maximum) and the output per worker is increasing. In stage 3 the producer gets no addition to total physical output from additional workers. It would be possible to have more total physical product with less labour applied to a fixed factor (say machinery).

## **UNIT 1**

### **MODULE 2: MARKET STRUCTURE, MARKET FAILURE AND INTERVENTION**

#### **GENERAL OBJECTIVES**

On completion of this Module, students should:

1. appreciate the distinction between the different types of market structures;
2. develop awareness of the causes of market failure;
3. appreciate the measures that can be adopted to reduce or eliminate market failure;
4. appreciate the arguments which suggest that government intervention may not necessarily improve economic performance.

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 1: Market Structure**

Students should be able to:

1. outline the goals of the firm;
2. explain how firms measure profits;
3. explain the concepts of average, marginal and total revenue;
4. explain the concept of market structure;
5. outline the characteristics of the different market structures;
6. distinguish among the different market structures;
7. explain the factors that influence the pricing and output decisions of the firm;
8. calculate measures of industrial concentration;
9. interpret measures of industrial concentration.

## **UNIT 1**

### **MODULE 2: MARKET STRUCTURE, MARKET FAILURE AND INTERVENTION (cont'd)**

#### **CONTENT**

1. Profit maximization, growth, satisficing, sales and revenue maximization, market dominance.
2. Total revenue, total cost, normal and economic (abnormal) profit.
3. Relationship between average, marginal and total revenue.
4. Types of market structures: perfect competition, monopoly including price discrimination, monopolistic competition, oligopoly and cartels.
5. Characteristics of the different market structures.
  - (a) *barriers to entry;*
  - (b) *control over market and price;*
  - (c) *nature of the good;*
  - (d) *numbers of buyers and sellers;*
  - (e) *competitive behaviour and performance.*
6. Focus on all characteristics of the different markets in addition to profit maximization.
  - (a) *Examples of close approximations of market structures in the Caribbean.*
7. Marginal cost and marginal revenue, total cost and total revenue, marginal cost pricing and average cost pricing.
8. Herfindahl Hirschman Index - the percentage of an industry's output produced by its four largest firms (four-firm concentration ratio):
$$H = \sum_{i=1}^n s_i^2$$

*where  $s_i$  is the market share of firm  $i$  in the market, and  $n$  is the number of firms.*
9.
  - (a) *Interpretation related to market structures.*
  - (b) *Limitations of measures of industrial concentration.*

## **UNIT 1**

### **MODULE 2: MARKET STRUCTURE, MARKET FAILURE AND INTERVENTION (cont'd)**

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 2: Market Failure**

Students should be able to:

1. explain the concept of economic efficiency;
2. distinguish among private goods, public goods and merit goods;
3. distinguish between social costs and private costs and social benefits and private benefits;
4. explain the concept of market failure;
5. explain what is meant by deadweight loss;
6. outline the causes of market failure.

#### **CONTENT**

1. Inclusion of discussion of Pareto efficiency.
2. (a) *Examples of private goods, public goods and merit goods.*  
(b) *Discussion of issues of rivalry and exclusion.*
3. Social costs, private costs, social benefits, private benefits, external costs, external benefits. Use of graphical representations.
4. Divergence of social costs and social benefits and efficiency. Use of graphical representations.
5. Deadweight loss including verbal and graphical representations.
6. Causes of market failure:
  - (a) *monopoly;*
  - (b) *public goods and merit goods;*
  - (c) *externalities: positive and negative;*

## **UNIT 1**

### **MODULE 2: MARKET STRUCTURE, MARKET FAILURE AND INTERVENTION (cont'd)**

- (d) divergence between social and private costs and social and private benefits;
- (e) imperfect information;
- (f) asymmetric information: adverse selection and moral hazard;
- (g) open access to resources;
- (h) lack of property rights (squatting, streams, ocean);
- (i) non-existence of markets (for trading).

## **SPECIFIC OBJECTIVES**

### **TOPIC 3: Intervention**

Students should be able to:

1. evaluate the measures used by government to correct market failure;
2. evaluate the measures used by the private sector to correct market failure.

## **CONTENT**

### 1. Measures used by government to control market failure:

- (a)
  - regulation;
  - anti-trust policy;
  - taxation;
  - privatisation and deregulation;
  - state ownership;
  - subsidies;
  - legislation;
  - market creation (tradable permits);
- (b) pros and cons of government intervention;
- (c)
  - merits and demerits;
  - effectiveness of intervention in Caribbean societies (effect of small size in relation to policy making).

## **UNIT 1**

### **MODULE 2: MARKET STRUCTURE, MARKET FAILURE AND INTERVENTION (cont'd)**

2. Private Sector Intervention:

- (a) *corporate code of conduct;*
- (b) *corporate social responsibility;*
- (c) *voluntary agreements;*
- (d) *corporate ethics.*

#### **Suggested Teaching and Learning Activities**

*To facilitate students' attainment of the objectives of this Module, teachers are advised to engage students in the teaching and learning activities listed below.*

- 1. For price discrimination, teachers could identify the first, second and third degree price discrimination using different examples from students' experiences. Teachers should then illustrate by use of diagrams.
- 2. For the kinked demand curve model, teachers may use the daily newspaper or mobile phone industry as examples.

## **UNIT 1**

### **MODULE 3: DISTRIBUTION THEORY**

#### **GENERAL OBJECTIVES**

On completion of this Module, students should:

1. understand what accounts for the returns that accrue to the owners of the factors of production;
2. appreciate the issues surrounding poverty and the measures used to alleviate poverty;
3. develop skills in applying microeconomic analysis to critical social issues involving income inequality.

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 1: The Demand for and Supply of Factors**

Students should be able to:

1. explain the rewards of the factors of production;
2. explain the concept of derived demand;
3. outline the marginal productivity theory;
4. apply the marginal productivity theory to the demand for land, capital and labour;
5. analyse the factors affecting the supply of land, capital and labour;
6. analyse the factors determining rent, interest and wages;
7. distinguish between transfer earnings and economic rent.

#### **CONTENT**

1. Rent, interest, wages and profits.
2. Derived demand.
  3. (a) The assumptions and limitations of Marginal Productivity Theory.
  - (b) Marginal Physical Product, Marginal Revenue Product and their relationship.

## **UNIT 1**

### **MODULE 3: DISTRIBUTION THEORY (cont'd)**

4. The value of the Marginal Product:
  - (a) land;
  - (b) labour;
  - (c) capital - using present value (use of graphical representation required).
5. The fixity of land, the supply of loanable funds and the labour supply.
6. The demand for and supply of factors.
7. Numerical, graphical and verbal explanations of transfer earnings and economic rent.

## **SPECIFIC OBJECTIVES**

### **TOPIC 2: Wage Differentials**

Students should be able to:

1. explain the concept of wage differentials;
2. analyse imperfections in the labour market;
3. analyse the effect of labour mobility on wages;
4. explain the concept of compensating wage differentials;
5. explain the role of Government, Trade Unions and Employers' Associations in the pricing of labour.

## **CONTENT**

1. Differences in wages within industries and among industries.
2. Imperfections on the demand side (for example, differences in marginal productivity) and on the supply side (for example, geographical immobility).
3. The mobility and immobility of labour; geographical (migration of workers), occupational.
4. Compensating (equalizing) differentials.

## **UNIT 1**

### **MODULE 3: DISTRIBUTION THEORY (cont'd)**

5. The minimum wage rate; monopsonies; migration of workers; collective bargaining; trade union strategies, the role of employers' associations; efficiency wage.

## **SPECIFIC OBJECTIVES**

### **TOPIC 3: Income inequality, Poverty and Poverty Alleviation**

Students should be able to:

1. differentiate between size and functional distribution of income;
2. explain the concept of income inequality;
3. explain the measures of income inequality;
4. explain the measures used to reduce income inequality;
5. distinguish between absolute and relative poverty;
6. outline factors that contribute to poverty;
7. explain why certain categories of people are more susceptible to poverty than others;
8. evaluate the different ways used to measure poverty;
9. outline strategies used by Governments to alleviate poverty;
10. analyse the economic costs of poverty;
11. assess the economic benefits of government intervention to alleviate poverty.

## **CONTENT**

1. Size and functional distribution of income.
2. How income is distributed.
3. Lorenz curve measurement of income inequality; and Gini coefficient (interpretation only).
4. Measures to reduce inequality: taxes, subsidies, transfers.

**UNIT 1**  
**MODULE 3: DISTRIBUTION THEORY (cont'd)**

5. Absolute versus relative poverty.
6. Factors that contribute to poverty including:
  - (a) *social and physical environment;*
  - (b) *discrimination – gender, race;*
  - (c) *restrictions on certain economic activities;*
  - (d) *non-ownership of resources;*
  - (e) *family size;*
  - (f) *single parent; female-headed families.*
7. Persons who are most susceptible to poverty:
  - (a) *people with special needs;*
    - (i) *physically challenged;*
    - (ii) *elderly;*
    - (iii) *youth;*
    - (iv) *single parent families;*
    - (v) *indigenous people;*
  - (b) *reasons – Limited access to employment, level of training, legislation, availability of income to share among family.*
8. Ways used to measure poverty:
  - (a) *basic needs;*
  - (b) *poverty line;*
  - (c) *head count;*
  - (d) *UNDP Human Development Index (HDI).*

## **UNIT 1**

### **MODULE 3: DISTRIBUTION THEORY (cont'd)**

9. Strategies to alleviate poverty:
  - (a) *transfer payments;*
  - (b) *free education and health care;*
  - (c) *housing;*
  - (d) *minimum wage legislation;*
  - (e) *equal employment opportunities;*
  - (f) *Government employment creation (special works programmes).*
10. The cost of poverty, including:
  - (a) *unemployed human resources;*
  - (b) *lower potential output;*
  - (c) *inefficient allocation of Government expenditure;*
  - (d) *social and environmental costs.*
11. Economic benefits including:
  - (a) *provision of education and health leading to development of human capital;*
  - (b) *improvement in well-being as measured by the UNDP (HDI);*
  - (c) *more equitable distribution of income.*

#### **Suggested Teaching and Learning Activities**

*To facilitate students' attainment of the objectives of this Module, teachers are advised to engage students in the teaching and learning activities listed below.*

1. Use knowledge from topic 3, unit 1, Theory of Supply, to derive the demand curve for factors of production.
2. Teachers may use graphical representation of the Lorenz Curve to illustrate unequal distribution of income. Teachers should also relate the Lorenz Curve to the GINI coefficient. Also show the effect of taxes on the Lorenz Curve and the GINI coefficient.

## ◆ UNIT 2: MACROECONOMICS

### MODULE 1: MODELS OF THE MACROECONOMY

#### GENERAL OBJECTIVES

On completion of this Module, students should:

1. appreciate the notion of National Income accounting and the importance of these accounts for macroeconomic theory and policy;
2. understand the views of the classical keynesian and monetarists schools;
3. understand the factors that influence the level of investment in an economy.

#### SPECIFIC OBJECTIVES

##### TOPIC 1: National Income Accounting

Students should be able to:

1. explain the circular flow of income;
2. explain the concept of National Income Accounting;
3. explain the different ways of deriving National Income Accounts;
4. interpret National Income statistics;
5. use National Income accounts to analyze the performance on an economy as a whole;
6. derive real GDP from nominal GDP;
7. explain the limitations of GDP.

#### CONTENT

1. Economic agents.
2. Gross Domestic Product (GDP), Gross National Product (GNP) and other measures.
3. Calculation of GDP, GNP and their components (personal income, disposable income), Net National Income (NNI), and per capita income; avoidance of double counting.

## **UNIT 2**

### **MODULE 1: MODELS OF THE MACROECONOMY (cont'd)**

4. Total measures:
  - (a) *GDP at market prices;*
  - (b) *GDP at factor costs.*
5. Use of National income accounts to measure economic performance over time and to make inter-country comparisons.
6. Calculation of real and nominal GDP using the price deflator.
7. Limits of National Income Accounts as a measure of well-being:
  - (a) *non-inclusion of the informal sector (the underground economy, illegal activities);*
  - (b) *non-payment for do-it-yourself activities;*
  - (c) *non-accounting for externalities, environmental degradation (Green GDP);*
  - (d) *the fact that it measures changes in the value of output but not changes in the quality of life.*

## **SPECIFIC OBJECTIVES**

### **TOPIC 2: Classical models of the Macroeconomy**

Students should be able to:

1. explain why within the classical model, all employment is voluntary;
2. explain how full employment is restored in the classical model;
3. explain the factors that influence aggregate demand;
4. explain the factors that influence aggregate supply;
5. interpret the classical long run supply curve;
6. explain price level determination within the classical model;
7. use the classical aggregate demand and supply model to show changes in the price level and employment.

## **UNIT 2**

### **MODULE 1: MODELS OF THE MACROECONOMY (cont'd)**

#### **CONTENT**

1. Flexibility of wages and prices.
2. The role of wage price and interest rate flexibility.
3. The factors that influence aggregate demand:
  - (a) consumer spending;
  - (b) investment spending;
  - (c) Government spending;
  - (d) net export spending.
4. Factors that influence aggregate supply including changes in input prices and incomes.
5. The assumptions of the vertical aggregate supply curve.
6. The interaction of the classical aggregate demand and supply curves.
7. Shifts in the aggregate demand and aggregate supply curves.

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 3: Basic Keynesian Models**

Students should be able to:

1. explain the consumption function;
2. explain the relationship between saving and consumption;
3. calculate the simple multiplier;
4. explain the effect of changes in investment on national income;
5. explain the effect of government spending on national income;
6. describe the effect of withdrawals and injections on national income;

## **UNIT 2**

### **MODULE 1: MODELS OF THE MACROECONOMY (cont'd)**

7. explain the relationship between net exports and national income;
8. determine the equilibrium level of national income;
9. explain inflationary and deflationary gaps.

#### **CONTENT**

1. Autonomous and induced consumption.
2. (a) Income = consumption plus saving.  
(b) marginal propensity to consume and save.  
(c) average propensity to consume and save.
3. Simple multiplier  $\left( \frac{1}{1 - mpc} \right)$ .
4. Relationship between changes in investments and national income.
5. Government's expenditure and its effects on national income.
6. (a) Concepts of injections and withdrawals in an economy.  
(b) The effect of injections and withdrawals on national income.  
(c) Small multipliers in the Caribbean context due to leakages.
7. (a) Relationship between net exports ( $x - m$ ) and national income.  
(b) Exports as an injection and imports as a withdrawal.
8. Determination of equilibrium income using:
  - (a)  $45^\circ$  line or  $E=Y$ ;
  - (b) withdrawals and injections approach;
  - (c) the Keynesian aggregate demand and supply curves (long run and short run).

## **UNIT 2**

### **MODULE 1: MODELS OF THE MACROECONOMY (cont'd)**

9. (a) Full employment level of output.
- (b) Actual level of output.
- (c) Equilibrium level of national income could be either below, at or above potential level of output.

## **SPECIFIC OBJECTIVES**

### **TOPIC 4: Investment**

Students should be able to:

1. explain the concept of investment;
2. differentiate between the investment demand curve and the investment curve;
3. explain the accelerator theory;
4. outline the factors that account for the volatility of investment.

## **CONTENT**

1. Investment (induced and autonomous).
2. (a) Marginal efficiency of capital (investment demand as a function of expected rate of return).  
      (b) Marginal efficiency of investment (non-interest rates as determinants of investment demand, taxes, costs, stock of capital goods on hand expectations).
3. Accelerator theory of investment.
4. Determinants of investment:
  - (a) The accelerator;
  - (b) Durability;
  - (c) Irregularity of innovation;
  - (d) Variability of profits, expectations and interest rates.

## **UNIT 2**

### **MODULE 1: MODELS OF THE MACROECONOMY (cont'd)**

#### **Suggested Teaching and Learning Activities**

*To facilitate students' attainment of the objectives of this Module, teachers are advised to engage students in the teaching and learning activities listed below.*

1. For topic 1, teachers should pay special attention to the rules of accounting working from the GDP down to consumption and savings. Teachers should also deal with the concepts such as market price and factor costs, as well as real GDP and nominal GDP. Make use of the circular flow diagram from the closed economy to the open economy.
2. For topic 2, Classical Models of the Macroeconomy, teachers should use graphs to emphasise flexibility and the automatic return to equilibrium.
3. For topic 3, teachers could demonstrate the operation of the multiplier by using data to show the successive rounds of spending. Calculations and graphical representations of the multiplier are required.
4. Use the  $45^\circ$  line and average demand and average supply to show inflationary and deflationary gaps.
5. For topic 4, Investment, teachers may use tables to illustrate and explain the accelerator, that is, the necessity to increase expenditure, constantly, for investment.

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES**

#### **GENERAL OBJECTIVES**

On completion of this Module, students should:

1. understand the reasons why an economy may be characterised by unemployment and how intervention may be used to improve economic performance;
2. appreciate the role of the Central Bank in the economy;
3. understand monetary and fiscal policy and their applications;
4. understand the nature and burden of the national debt.

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 1: Unemployment and Inflation**

Students should be able to:

1. explain what is meant by the labour force;
2. explain the unemployment rate;
3. distinguish between unemployment and underemployment;
4. evaluate the costs of unemployment;
5. explain the causes of unemployment;
6. evaluate the policies used to reduce unemployment;
7. explain the causes of inflation;
8. distinguish between real and nominal variables;
9. explain how inflation is measured;
10. explain the causes of inflation;
11. evaluate the effects of inflation;

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

12. evaluate the policies used to combat inflation;
13. explain the relationship between the unemployment rate and inflation.

## **CONTENT**

1. Employed and unemployed.
2. The unemployment rate.
3. Unemployment and underemployment.
4. The effect on output, income and growth: additional financial burden on the state; social costs.
5. Labour immobility, other market imperfections, structural changes in the economy, inadequate aggregate demand, increase in labour force participation rate, seasonality, intervention.
6. Fiscal policy, monetary policy, wage subsidies, retraining programmes, investment tax credit, employment tax credit, government employment programmes, reducing market imperfections.
7. Inflation: general price level.
8. Real and money wages:
  - (a) real and nominal GDP;
  - (b) real and nominal interest rate.
9. The GDP deflator; the retail price index; the producer price index. Calculations and limitations of the indices.
10. Demand shocks, supply shocks, increase in the money supply growth rate.
11. The costs and benefits of inflation: the impact of redistribution of wealth; impact of business activity and growth, impact on the balance of payments.
12. Income policy, monetary policy, fiscal policy and supply side measures.
13. Trade-off between inflation and the rate of unemployment: Phillips curve - stagflation.

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 2: Monetary Theory and Policy**

Students should be able to:

1. explain the concept of money;
2. outline the functions of money;
3. explain the demand for money;
4. explain the supply of money;
5. explain monetary policy;
6. explain how the money supply is controlled;
7. explain how money is created in the banking system;
8. explain why residents substitute foreign for domestic currency;
9. explain the Quantity Theory of Money;
10. outline the types of monetary policy;
11. describe the effects of monetary policy on national income;
12. evaluate the limitations of monetary policy.

#### **CONTENT**

1. (a) The meaning of money.  
(b) Types of money: token and commodity.
2. Functions of money.
3. (a) Liquidity Preference Theory.  
(b) Motives for holding money (transactions, precautionary, speculative).

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

4. The money supply (M1, M2).
5. Monetary policy – expansionary and contractionary policies.
6. (a) The role of the central bank in creating high-powered money (monetary base).  
(b) Instruments of monetary control:
  - (i) open market operations;
  - (ii) discount rates;
  - (iii) financing fiscal deficits;
  - (iv) reserve requirements;
  - (v) moral suasion;
  - (vi) interest rates.
7. (a) Excess reserves.  
(b) Credit creation.  
(c) The money multiplier.
8. The nature of currency substitution and hoarding.
9. The Quantity Theory of money.
10. (a) Tight monetary policy (inflation).  
(b) Easy monetary policy (unemployment).  
(c) Balance of payments.
11. How monetary policy affects national income.
12. Limitations of monetary policy including the fact that it is:  
(a) *permissive, not compelling and only creates the environment;*

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

- (b) difficult to control the money supply of foreign-owned commercial banks;
- (c) difficult to eliminate lags in monetary policy;
- (d) weakened by fiscal indiscipline.

## **SPECIFIC OBJECTIVES**

### **TOPIC 3: Fiscal Policy**

Students should be able to:

1. explain the concept of fiscal policy;
2. outline the goals of fiscal policy;
3. explain the nature of the budget;
4. explain the balanced budget multiplier;
5. outline methods of financing budget deficits;
6. evaluate the limitations of fiscal policy;
7. distinguish between discretionary and non-discretionary fiscal policy.

## **CONTENT**

1. The meaning of fiscal policy.
2. Fiscal policy as a means of addressing:
  - (a) aggregate demand;
  - (b) unemployment;
  - (c) inflation;
  - (d) balance of payments.

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

3. The nature of the budget:
  - (a) taxation, revenue, transfer, expenditure;
  - (b) budget surplus and budget deficit;
  - (c) balanced budget.
4. Explanation of the balanced budget multiplier.
5. Methods of financing budget deficits including external and domestic borrowing.
6. Lags and potency of fiscal policy.
7. (a) Expansionary and contractionary.  
(b) Automatic stabilisers.

## **SPECIFIC OBJECTIVES**

### **TOPIC 4: Public Debt**

Students should be able to:

1. explain the national debt;
2. explain the cause of the national debt;
3. evaluate the effects of the national debt on the economy;
4. explain the burden of the national debt;
5. evaluate ways of reducing the debt burden;
6. interpret the debt service ratio;
7. calculate the debt service ratio.

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

#### **CONTENT**

1. The national debt:
  - (a) stock/flow;
  - (b) fiscal indiscipline;
  - (c) domestic and foreign debt.
2. The causes of the national debt.
3. The effects of the national debt on the economy:
  - (a) output and investment decisions;
  - (b) exchange rate pressures;
  - (c) inflation;
  - (d) crowding out and crowding in.
4. The responsibility for debt repayment.
5. Management of the national debt:
  - (a) internal and external borrowing;
  - (b) taxation;
  - (c) debt rescheduling;
  - (d) debt forgiveness.
6. Interpretation of the debt service ratio.
7. Calculation of the debt service ratio (principal plus interest as a percentage of export).

## **UNIT 2**

### **MODULE 2: MACROECONOMIC PROBLEMS AND POLICIES (cont'd)**

#### **Suggested Teaching and Learning Activities**

*To facilitate students' attainment of the objectives of this Module, teachers are advised to engage students in the teaching and learning activities listed below.*

1. For topic 1, Unemployment and Inflation, teachers should use the Phillips Curve to show the relationship between the unemployment rate and inflation rate.
2. For topic 2 (money multiplier), show the various rounds in the money expansion process as done in the multiplier. Use Central Bank Acts and Reports for data gathering.
3. For fiscal policy, there is no need for students to derive the balanced budget multiplier. This should only be explained.
4. Teachers should emphasise the causes of the national debt and the burden it places on future generations.

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS**

#### **GENERAL OBJECTIVES**

On completion of this Module, students should:

1. understand the basic concepts of growth and development;
2. understand the impact of imports and exports on the macroeconomy;
3. understand the balance of payments accounts and *appreciate* the causes and consequences of balance of payments crises;
4. *become aware of* the benefits and costs derived from current integration arrangements, such as CARICOM, FTAA and the EU;
5. understand the role and functions of international economic institutions.

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 1: Growth and Sustainable Development**

Students should be able to:

1. distinguish between growth and development;
2. explain the concept of sustainable development;
3. outline the factors that determine growth;
4. outline the factors that contribute to sustainable development;
5. explain the concept of human development;
6. analyse the structural characteristics of Caribbean economies;
7. analyse the impact of the region's structural characteristics on sustainable economic development.

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

#### **CONTENT**

1. Differences between growth and development.
2. Current growth versus the well-being of future generations.
3. Differences between exogenous (technical change) and endogenous growth (capital accumulation, human capital).
4. Economic, social and environmental factors.
5. Indices of human development including mortality rates, literacy, per capita income, life expectancy.
6. Structural characteristics of Caribbean economies including:
  - (a) small size;
  - (b) openness;
  - (c) composition of exports;
  - (d) resource base;
  - (e) poverty;
  - (f) economic dependence.
7. Implications for regional economies:
  - (a) dependence on aid;
  - (b) preferential trade agreements;
  - (c) foreign direct investment (FDI);
  - (d) vulnerability to natural and man-made change;
  - (e) changes in world prices.

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 2: International Trade**

Students should be able to:

1. analyse the role of imports and exports in a small open economy;
2. outline the factors that influence exports and imports;
3. explain the effects of foreign exchange earnings on a small open economy;
4. explain the theory of comparative advantage;
5. evaluate the arguments for protection;
6. evaluate the arguments for Trade Liberalisation;
7. outline methods of trade protection;
8. explain the commodity, terms of trade;
9. interpret changes in the commodity terms of trade;
10. calculate the commodity, terms.

#### **CONTENT**

1. The role of exports in creating domestic income and the role of imports in generating income for foreigners.
2. The factors which determine exports and imports including:
  - (a) international price;
  - (b) domestic production;
  - (c) domestic prices and exchange rates;
  - (d) international economic activity as it affects the tourism market in the Caribbean;

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

- (e) shifts in international demand and the emergence of substitutes;
  - (f) changes in International Income.
3. Foreign exchange earnings from exports:
- (a) access to capital goods;
  - (b) the export multiplier;
  - (c) access to consumer goods;
  - (d) increased domestic production.
4. The theory of comparative advantage.
5. Arguments for protection including:
- (a) infant industries;
  - (b) employment;
  - (c) food security.
6. Arguments for Trade Liberalisation including access to technology, availability of cheaper goods and services. Application of the theory of comparative advantage.
7. Methods of protection including: tariffs, quotas and other non-tariff methods.
8. Explanation of the commodity terms of trade.
9. Interpretation of changes in the commodity terms of trade.
10. Export price index divided by import price index multiplied by 100.

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 3: Balance of Payments and Exchange Rates**

Students should be able to:

1. explain the balance of payments;
2. distinguish between the current account and capital account;
3. analyze the causes and consequences of balance of payments disequilibria;
4. outline the policy measures for correcting balance of payments disequilibria;
5. explain exchange rates;
6. explain exchange rates determination;
7. distinguish between fixed and floating exchange rate regimes;
8. describe the effects of the exchange rate changes.

#### **CONTENT**

1. Explanation of the balance of payments.
2. Capital items and current items.
3. The causes and consequences of balance of payments - disequilibria.
4. Policy responses to balance of payments crises including:
  - (a) devaluation;
  - (b) expenditure switching;
  - (c) expenditure reducing measures.
5. Explanation of exchange rates.
6. Determination of exchange rates.

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

7. Fixed and floating exchange rate systems (fixed, free floating and managed float).
8. The effects of exchange rate changes.

## **SPECIFIC OBJECTIVES**

### **TOPIC 4: Economic Integration**

Students should be able to:

1. explain the main forms of economic integration;
2. evaluate the costs and benefits of economic integration;
3. evaluate the objectives of Caribbean integration;
4. analyse the implications of international integration arrangements for Caribbean economies.

## **CONTENT**

1. Main forms of economic integration, including:
  - (a) *free trade area*;
  - (b) *customs union*;
  - (c) *common market*;
  - (d) *economic union*.
2. The costs and benefits of economic integration including trade creation and trade diversion.
3. The objectives of CARICOM and the rationale for the CARICOM Single Market and Economy (CSME).
4. The significance of integration movements, for example European Union (EU) and the North American Free Trade Agreement (NAFTA) for Caribbean Economies.

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

#### **SPECIFIC OBJECTIVES**

##### **TOPIC 5: International Economic Relations**

Students should be able to:

1. explain the role and functions of the World Trade Organisation (WTO);
2. explain the role of international financial institutions (IFI's);
3. explain the term multinational (transnational) corporation;
4. explain the nature of foreign direct investment;
5. outline the potential benefits and disadvantages of foreign direct investment;
6. explain the term globalisation;
7. describe the factors responsible for globalisation;
8. evaluate the effects of globalisation on developing countries.

#### **CONTENT**

1. The role and functions of the WTO.
2. The role of the IMF and World Bank in the International Financial System.
3. Explanation of multinational (transnational) corporation.
4. The nature of foreign direct investment.
5. Potential benefits and disadvantages, including:
  - (a) access to technology and capital;
  - (b) access to markets;
  - (c) access to management skills;
  - (d) repatriation of profits;

## **UNIT 2**

### **MODULE 3: GROWTH, SUSTAINABLE DEVELOPMENT AND GLOBAL RELATIONS (cont'd)**

- (e) transfer pricing;
  - (f) crowding out of domestic businesses.
6. The concept of globalisation.
  7. Forces driving globalisation, for example, technological innovation, trade liberalisation, and liberalisation of capital markets.
  8. Implications of globalisation for developing countries with particular reference to the greater Caribbean (greater competition, access to markets, access to technology, cheaper prices and greater variety of goods, loss of preferential markets).

#### **Suggested Teaching and Learning Activities**

*To facilitate students' attainment of the objectives of this Module, teachers are advised to engage students in examining the structure of the economies of the Caribbean and the problems of imports and exports using international partnership agreements and policies. Teacher should ensure that students could distinguish among;*

- (a) Terms of Trade;
- (b) Balance of Trade; and
- (c) Balance of Payments.

## ◆ OUTLINE OF ASSESSMENT

Each Unit of the syllabus will be assessed separately. The same scheme of assessment will be applied to each Module in each Unit. Grades will be awarded independently for each Unit.

Candidate assessment on each Unit will comprise two components:

- (i) External Assessment undertaken at the end of the academic year in which the Unit is taken. This component contributes 80% to the candidate's overall grade.
- (ii) School Based Assessment undertaken throughout the course of the Unit. This contributes 20% to the candidate's overall grade.

### EXTERNAL ASSESSMENT (80%)

**Paper 01** Forty-five multiple-choice items, fifteen (15) on each Module. 30%  
(1 hour 30 minutes)

**Paper 02** The paper consists of three (3) sections comprising six (6) questions spread across all Modules in the Unit. Each section contains two (2) essay type questions from which candidates are required to attempt one (1). 50%  
(2 hours 30 minutes)

### SCHOOL BASED ASSESSMENT FOR EACH UNIT (20%)

#### Paper 03/1

School Based Assessment in each Unit will comprise one project testing *one or more Modules*. This project is to be assessed by the teacher, using assessment criteria provided by CXC

Topics of projects will be determined largely by the candidate in consultation with the teacher who must adhere to the guidelines set out on pages 47-49.

#### Paper 03/2

Private candidates are required to write an Alternative Paper - 03/2. Details of this paper is on pages 55-56.

### MODERATION OF SCHOOL BASED ASSESSMENT

A School Based Assessment Record Sheet will be sent each year to schools submitting students for the examinations.

All School-Based Assessment Record Sheets and sample of assignments must be submitted to CXC by May 31 of the year of the examination. *All School-Based Assessment Record of marks must be submitted online using the SBA data capture module of the Online Registration System (ORS) found on the Council's website www.cxc.org*

A sample of assignments will be requested by CXC for moderation purposes. These samples will be re-assessed by CXC Examiners who moderate the Internal Assessment. Teachers' marks may be adjusted as a result of moderation. The Examiners' comments will be sent to schools.

Copies of the students' assignments that are not submitted must be retained by the school until three months after publication by CXC of the examination results.

## ASSESSMENT DETAILS

### EXTERNAL ASSESSMENT

External Assessment by written papers (80% of Total Assessment)

#### Paper 01 – (1 hour 30 minutes - 30% of Total Assessment)

##### 1. Composition of Paper

- (i) This paper consists of forty-five multiple choice items, fifteen on each module.
- (ii) Paper 01 will assess the candidate's mastery of skills *outlined* on page 2, but will focus primarily on the candidate's ability to interpret basic economic data and to solve quantitative problems in economics.

##### 2. Mark Allocation

- (i) This paper is worth 90 marks, each question being allocated 2 marks.
- (ii) Paper 01 contributes 30% to the candidate's final grade.

##### 3. Question Type

- (i) Paper 01 comprises forty-five multiple choice items.
- (ii) Some of the questions will be based on sets of economic data which will be provided with the relevant questions.

##### 4. Use of Calculators

Candidates may use silent non-programmable calculators.

**Paper 02 – (2 hours 30 minutes - 50% of Total Assessment)**

**1. Composition of Paper**

- (i) This paper comprises three sections: Section 1, Section 2, and Section 3. For each Unit, Section 1 tests objectives in Module 1, Section 2 tests objectives in Module 2 and Section 3 tests objectives in Module 3.
- (ii) Each section comprises two questions, for a total of six questions. Candidates must answer three questions, one from each section.

**2. Mark Allocation**

- (i) This paper is worth 150 marks, each essay question *will be* being marked out of 25 *then weighted to 50*.
- (ii) This paper tests candidates' understanding of basic economic concepts and their ability to apply these concepts to everyday situations. It will also test candidates' ability to recognise the limitations of economic theory and to present their ideas in a clear, logical and coherent manner.
- (iii) Paper 02 contributes 50% to the candidate's final grade.

**3. Question Type**

- (i) Paper 02 comprises 6 essay-type questions which require candidates to provide extended responses.
- (ii) Questions may use stimulus material, for example, tables, graphs, reports, diagrams or prose. Paper 01, Paper 02 and the internal assessment will test the candidate's ability to demonstrate the following SKILLS critical to the study of Economics:
  - (a) Knowledge and Understanding;
  - (b) Application and Analysis;
  - (c) Evaluation and Synthesis.

## **GUIDELINES FOR THE CONDUCT OF INTERNAL ASSESSMENT**

Internal Assessment is an integral part of student assessment in the course covered by this syllabus. It is intended to assist students in acquiring certain knowledge, skills and attitudes that are critical to the subject. The activities for the Internal Assessment are linked to the Modules and should form part of the learning activities to enable the student to achieve the objectives of the syllabus.

During the course of study of the subject students obtain marks for the competence they develop and demonstrate in undertaking their Internal Assessment assignment. These marks contribute to the final marks and grades that are awarded to students for their performance in the examination.

The guidelines provided in this syllabus for selecting appropriate tasks are intended to assist teachers and students in selecting assignments that are valid for the purpose of Internal Assessment. These guidelines are also intended to assist teachers in awarding marks according to the degree of achievement in the Internal Assessment component of the course. In order to ensure that the scores awarded by teachers are in line with the CXC standards, the council undertakes the moderation of a sample of the Internal Assessment assignments marked by each *centre*.

Internal Assessment provides an opportunity to individualise a part of the curriculum to meet the needs of students. It facilitates feedback to the students at various stages of the experience. This helps to build the self confidence of the students as they proceed with their studies. Internal Assessment further facilitates the development of essential research skills that allow the student to function more effectively in his or her chosen vocation. Internal Assessment, therefore, makes a significant and unique contribution to the development of relevant skills of the students. It also provides an instrument for testing them and rewarding them for their achievements.

### **Internal Assessment**

#### **The Project-Paper 03/1**

##### **Presentation of Project**

In this subject, the Internal Assessment for each Unit will be a project.

**(i) The Aims of the Project are to:**

- (a) promote self-learning;
- (b) promote investigative skills;
- (c) enable the teacher to contribute to the evaluation;
- (d) develop in students improved attitudes and skills;
- (e) develop in students an ability to identify suitable resource material on their own and to develop a disposition for independent research.

## **Sources of Data and Information**

The primary and secondary sources of data listed below, can be used by candidates in their research activities.

- (a) International news magazines such as Fortune, Business Week, Newsweek and Forbes.
- (b) The business section of local newspapers.
- (c) Statistical reports such as national income statistics, balance of payments statistics, survey of living conditions, household budgetary surveys, annual economic reports of Central Banks, Ministries of Finance and Planning units.
- (d) Annual reports of firms in the region.
- (e) The economic information available on the internet.
- (f) Budget speeches of Ministers of Finance.
- (g) Reviews of estimates of income and expenditure from Ministries of Finance.

### **(ii) Management of the Project**

- (a) An early start to planning project work is highly recommended. Each candidate should know the requirements of the project and its assessment procedures as part of the orientation to the Unit.
- (b) Teachers should guide the candidates in choosing appropriate projects that relate to the candidates' interest and the specific objectives identified.
- (c) Candidates are required to prepare an outline of the project for approval by the teacher.
- (d) A schedule of the dates for submitting project work (agreed to by teachers and candidates) should be firmly established.
- (e) The teacher should offer guidance in the data collection process and the preparation of the report.

### **(iii) Project Reports**

A candidate's report should be presented in a soft folder bearing the candidate's number, name of subject and the date submitted. The project document should comprise:

- (a) title;
- (b) table of contents;
- (c) aims and objectives;
- (d) methodology employed;
- (e) report (between 2000 - 2500 words);
- (f) references.

The report should include the following:

- (a) description;
- (b) analysis;
- (c) evaluation;
- (d) recommendations.

Students and teachers must ensure that the report contains the required components and address the skills identified on Page 2 of the syllabus.

Candidates are expected to present the report using graphs, charts and tables, where applicable. In addition, the reports should display clarity of exposition and correctness of grammar.

(iv) **Skills and Abilities to be tested**

The research project is designed to test the candidate's ability to:

- (a) demonstrate thorough knowledge of relevant theories, concepts and models;
- (b) apply economic concepts and principles to actual problems;
- (c) exhibit consistency of argument, effective use of language and other tools of communication;
- (d) demonstrate effective use of reference materials and appropriate citation.

(v) **Objectives to be tested**

*The project may be derived from the objectives and content of one, two or all three modules in the Unit. Regardless of how many modules are chosen, the teacher should ensure that students present a coherent investigation rather than a disjointed piece of work. The project should be marked out of 60 then the marks should be divided equally among the three modules. If there is a remainder of 1 it should be allocated to Module 3. If there is a remainder of 2 marks, 1 should be allocated to Module 3 and the other to Module 2. The teacher is advised to mark holistically out of 60 and to divide the total marks by three in order to satisfy the requirements of the three columns used to enter the student's marks.*

## MARKING SCHEME FOR INTERNAL ASSESSMENT

### Knowledge/Presentation/Methodology (14 marks)

(Includes marks for communicating information in a logical way using correct grammar)

The student has:

1. demonstrated a grasp of the meaning of basic economic facts, concepts and principles;
2. explained familiar economic phenomena in terms of theories, models, laws and principles;
3. developed a research design that provides a sound and efficient basis for drawing reasonable conclusions.

### **Application/Analysis (20 marks)**

(Includes marks for communicating information in a logical way using correct grammar)

The student has:

1. used the major economic concepts, principles and procedures in unfamiliar situations, transformed economic data accurately and appropriately, used common characteristics as a basis for classification;
2. identified and recognised the component parts of an economic theory or concept and interpreted the relationships between these parts;
3. inferred, predicted and drawn conclusions using relevant economic data;
4. made relevant and accurate calculations and recognised the limitations of economic data;
5. selected appropriate economic theories – matched, compared and cited appropriate examples in familiar situations.

### **Evaluation Synthesis (17 marks)**

(Includes marks for communicating information in a logical way using correct grammar)

The student has:

1. combined component parts to form a new meaningful whole, made predictions and solved problems;
2. made reasoned judgements and recommendations based on the value of ideas and information.

### **Communication (9 marks)**

**Candidates will be awarded 9 marks, for communicating information in a logical way using correct grammar.**

The student has:

1. presented arguments in a clear, concise, reasoned and objective manner using correct grammar;
2. used presentation aids such as graphs, charts and tables to communicate information in a logical way;
3. displayed logic and coherence in expressing economic arguments;
4. used proper referencing and citations of source materials. Using the example of the standard Chicago manual style is recommended. (See page 58 for example).

## DETAILED CRITERIA AND MARK SCHEME

<b>CRITERIA 1</b> Knowledge/Presentation/Methodology  <b>Total 14 marks</b>		The candidate should be able to select and present an investigation into a specific economic problem using appropriate economic concepts, principles, theories and methods. Further, the methodology employed should be appropriate for the study.	
<b>Abilities</b>		<b>Descriptors</b>	
The candidate has:			
<b>(a) Presentation (4 marks)</b>			
1. selected a relevant economic problem within the scope of the syllabus  <b>(maximum 2 marks)</b>		<ul style="list-style-type: none"> <li>▪ Title of project is related to the objectives in the syllabus and to the investigation and is clearly stated</li> <li>▪ Title of project is outside the scope of the syllabus or not clearly stated</li> </ul>	
2. listed at least TWO aims of the project  <b>(maximum 2 marks)</b>		<ul style="list-style-type: none"> <li>▪ Aims of the project are relevant, unambiguous and clearly stated</li> <li>▪ Aims of the project are irrelevant, ambiguous or not clearly stated</li> </ul>	
<b>(b) Methodology (6 marks)</b>			
3. described the methodology and procedures employed in conducting the investigation  <b>(maximum 6 marks)</b>		<ul style="list-style-type: none"> <li>▪ The research design is realistic in its scope, in that, the samples, measures and data work together to address the problem being investigated, so as to provide a sound and efficient basis for drawing reasonable conclusions</li> <li>▪ The research design is limited in its scope, inappropriate for the study and provides an efficient basis for drawing reasonable conclusions</li> </ul>	
<b>(c) Presentation of data (4 marks)</b>			
4. presented economic data in an acceptable manner using tables, graphs and charts  <b>(maximum 4 marks)</b>		<ul style="list-style-type: none"> <li>▪ Data presented are relevant to the aims of the project, clear, unambiguous and meaningful</li> <li>▪ Data presented are relevant to the aims of the project, but lack clarity and efficiency</li> <li>▪ Data presented are not quite relevant to the aims of the project and lack clarity</li> </ul>	
<b>TOTAL</b>		<b>14 marks</b>	

<b>CRITERIA 2</b> Application/Analysis  <b>Total 20 marks</b>	The candidate should be able to analyze the economic problem being investigated by examining its constituent parts in detail and applying appropriate economic models and concepts to interpret and explain the problem.	
<b>Abilities</b>	<b>Descriptors</b>	<b>Marks</b>
The candidate has:		
	<b>(a) Knowledge (10 marks)</b>	
1. demonstrated knowledge and understanding of economic concepts and principles  <b>(maximum 10 marks)</b>	<ul style="list-style-type: none"> <li>▪ excellent understanding of economic concepts, principles, theories and methods</li> <li>▪ good understanding of economic concepts, principles theories and methods but with a few errors</li> <li>▪ little or no understanding of economic concepts, principles, theories and methods</li> </ul>	8-10    5-7    0-4
	<b>(b) Interpretation of relationships among variables (10 marks)</b>	
2. used economic theories and concepts for interpretation and analysis  <b>(maximum 10 marks)</b>	<ul style="list-style-type: none"> <li>▪ Accurate calculations, recognition of the limitations of economic data and excellent use of economic theories and concepts for interpretation and analysis</li> <li>▪ Satisfactory use of economic theories and concepts for interpretation and analysis with some inaccuracies</li> <li>▪ Unsatisfactory use of economic theories and concepts for interpretation and analysis</li> </ul>	8-10    5-7    0-4
	<b>TOTAL</b>	<b>20 marks</b>

<b>CRITERIA 3</b> Evaluation/Synthesis  <b>Total 17 Marks</b>	The candidate should be able to develop structured and reasoned expositions on economic policy based on the research and recommend solutions to a specific economic problem based on the findings	
<b>Abilities</b>	<b>Descriptors</b>	<b>Marks</b>
The candidate has:		
	(a) Coherence, Organization and problem solving capability (10 marks)	
1. presented a written report of 1500 - 2000 words (excluding appendices) required for the assignment  <b>(maximum 10 marks)</b>	<ul style="list-style-type: none"> <li>▪ Report shows coherence, arguments are logically presented and there is evidence of the use or problem solving strategies</li> <li>▪ The candidate's major accomplishments or findings (related to the project) are given</li> <li>▪ The candidate's findings are the result of sound interpretation of the evidence derived from the research</li> </ul>	3  3  4
	(b) Judgments and Recommendations (7 marks)	
2. presented theoretically correct judgments based on the findings of the research  <b>(maximum 7 marks)</b>	<ul style="list-style-type: none"> <li>▪ Judgments are theoretically sound, plausible and based on the findings of the research</li> <li>▪ Judgments are theoretically sound but are not entirely supported by the findings of the research</li> <li>▪ Judgments are theoretically flawed and not based on the findings of the research</li> </ul>	5-7  2-4  0-1
	<b>TOTAL</b>	<b>17 marks</b>

<b>CRITERIA 4</b> Communication  <b>Total 9 marks</b>	The candidate should be able to observe international conventions of reporting by presenting information in a logical manner using correct grammar	
<b>Abilities</b>	<b>Descriptors</b>	<b>Marks</b>
The candidate has:		
<b>(a) Reference and Citations (3 marks)</b>		
1. prepared a bibliography acknowledging all sources of information in alphabetical order  <b>(maximum 3 marks)</b>	<ul style="list-style-type: none"> <li>▪ For persons interviewed, list comprises date, place and job title</li> <li>▪ For publications, list comprises the names of the author, publisher and year published</li> <li>▪ For internet sites, list comprises the address of the website and names of authors and organizations</li> </ul>	1  1  1
2. presented information in a logical manner using correct grammar  <b>(maximum 6 marks)</b>	<ul style="list-style-type: none"> <li>▪ Information is presented in an excellent and effective manner</li> <li>▪ Information is presented in a very good and meaningful manner</li> <li>▪ Information is fairly well organised and ideas are communicated satisfactorily</li> <li>▪ Information is presented in an unsatisfactory manner showing weaknesses in syntax, spelling, punctuation and the sequencing of ideas</li> </ul>	6  4-5  2-3  0-1
	<b>TOTAL</b>	<b>9 marks</b>

## **Paper 03/2 (1 hour 30 minutes)**

### **1. Number of Questions**

This Paper consists of THREE *questions, on each Module*. The questions will be based on the topic identified for the examination year. These are listed below. The questions may be divided into sub-parts. The Paper tests skills similar to those listed in the Internal Assessment (Paper 03/1).

### **2. Question Type**

Each question requires candidates to respond either in the form of an extended essay or a short paragraph.

### **3. Mark Allocation**

The Paper is worth 60 marks (20 marks per question) and constitutes 20% towards the final assessment.

### **4. Award of Marks**

Marks are awarded for expression, organisation and content.

## **◆ REGULATIONS FOR PRIVATE CANDIDATES**

Private candidates will be required to write Papers 01, 02 and 03/1. Paper 03/2 takes the form of a written examination taken at the end of the academic year. The details of the examination are given below.

### **UNIT 1 Paper 03/2 (1 hour 30 minutes)**

This paper consists of three questions; one on *each Module*. Each question will be worth 20 marks and candidates will be required to attempt all three questions. The topics for the examination years, 2010-2014 are listed below. In investigating a topic, candidates should focus on the relevant specific objectives for each of the three Modules in the Unit.

#### **Unit 1 Topics:**

- |                   |   |
|-------------------|---|
| 1. Topic for 2010 | - Evaluate the role of education as a means of poverty alleviation in your country. |
| 2. Topic for 2011 | - Investigate the impact of the mobile services operations in your country.         |
| 3. Topic for 2012 | - Investigate the operations of a monopoly in your country.                         |
| 4. Topic for 2013 | - Examine poverty and the distribution of income in your country.                   |

- 5. Topic for 2014 - Examine the level of earnings of different categories of workers in your country. Comment on the wage differentials that exist among them.
- 6. Topic for 2015 - Examine the growth and structure of the financial sector in the region and how these have impacted your country's economy.
- 7. Topic for 2016 - Evaluate the impact of migration on the economies of the home and host countries.

**Unit 2 Topics:**

- 6. Topic for 2010 - Examine fiscal and monetary policy used in your country. Evaluate their relative effectiveness on employment, income and output.
- 7. Topic for 2011 - Investigate the effectiveness of the transportation system in your country and comment on the implications for the rest of the economy.
- 8. Topic for 2012 - Investigate the impact of rising oil prices on the economy of your country.
- 9. Topic for 2013 - Investigate the unemployment rate existing in your country. Indicate the strategies which your government might adopt to deal with unemployment.
- 10. Topic for 2014 - Examine the impact on the environment as a result of increasing levels of housing and other developmental projects.
- 11. Topic for 2015 - Investigate Internet shopping by Caribbean residents. Examine its effects on your country's economy.
- 12. Topic for 2016 - Investigate the impact of the underground economy in your country.

## ◆ REGULATIONS FOR RE-SIT CANDIDATES

Re-sit candidates must rewrite Papers 01 and 02 of the examination for the year for which they re-register. Re-sit candidates may elect not to repeat the Internal Assessment component provided they rewrite the examination no later than two years following their first attempt.

Re-sit candidates must be entered through a school or approved educational institution.

## ◆ ASSESSMENT GRID

The Assessment Grid for each Unit showing marks assigned to each paper and to each Module, and the percentage contribution of each paper to the total scores.

PAPERS	MODULE 1	MODULE 2	MODULE 3	TOTAL (%)
<b>External Assessment</b>				
Paper 01	30	30	30	90 (30)
Paper 02	50	50	50	150 (50)
<b>Internal Assessment</b>				
Paper 03/1 or 03/2	20	20	20	60 (20)
<b>TOTAL</b>	100	100	100	300 (100)

## ◆ RESOURCES

- Anderton, A. *Economics*, 4<sup>th</sup> Edition, Causeway Press, 2006.
- Baumol, W. and Blinder, A. *Economic Principles and Policy*, Florida: Harcourt Brace and Company, 1998.
- Begg, D., Fisher, S. and Dornbusch, R. *Economics*, 8<sup>th</sup> Edition, London: McGraw-Hill International (UK) Limited, 2005.
- Hosein, R., and Gookool, R. *Cape Economics Study Guide Unit 1*, Caribbean Examinations Council, 2007.
- Lipsey, R. and Chrystal, K. *Principles of Economics*, 13<sup>th</sup> Edition, New York: Oxford University Press Inc., 2006.
- McConnell, C. and Brue, S. *Economics: Principles, Problems and Policies*, New York: McGraw-Hill Inc., 1992.
- Sloman, J. *Economics*, 6<sup>th</sup> Edition, Prentice Hall, 2006.
- Todaro, M. *Economics for a Developing World*, New York: Longman, 1986.

### REPORTS AND BULLETINS

Central Bank Economic Reports, *Annual Economic Reports*, *Quarterly Economic Bulletins*, Statistical Digest from Central Banks such as ECCB, CBTT, BOJ, CBB, CBG.

Central Statistical Services. *Balance of Payments*, and *National Income Accounts*, *Survey of Living Conditions*, *Household Budgetary Surveys*.

Economic Planning Units *Economic Reviews*, *Sectoral Reports from Planning Units* such as PIOJ, and Ministries of Planning across the region.

UNDP Human Development Reports.

World Bank Reports, such as World Development Reports.

Periodicals such as Businessweek, Newsweek, Fortune, Economist, Forbes and the business pages of news papers such as Jamaica Gleaner, Trinidad Guardian or Express, Barbados Advocate.

Budget Speeches, Public Sector Investment Programmes, Ministry of Finance Review of the Economy, and estimates of Revenue and expenditures for various territories.

## ◆ GLOSSARY

WORD	DEFINITION/MEANING
Account for	<i>Explain the reasons for, giving an indication of all relevant circumstances. Very different from 'Give an account of', which asks only for a detailed description.</i>
Analyse	<i>Study in depth, identifying and describing in detail the main characteristics.</i>
Assess	<i>Examine closely, with a view to measuring or 'weighing up' a particular situation. Consider in a balanced way: strengths and weaknesses, points for and against. In conclusion, state your judgement clearly.</i>
Comment	<i>State clearly and in a moderate fashion your opinions on the material in question. Support your views with references to suitable evidence or with explanation as appropriate.</i>
Compare	<i>Look for qualities or characteristics that resemble each other. Emphasise similarities but be aware also of points of differences.</i>
Contrast	<i>Stress the dissimilarities and differences between the items in question, but do not ignore points of similarities.</i>
Criticise	<i>Express your balanced judgement about the merit or truth of the material in question. Give the results of your scrutiny, establishing both strengths and weaknesses. Be specific.</i>
Define	<i>Give, concise, clear and authoritative meanings. Do not give too many details, but be sure to state the limits of the definition. Show how the thing you are defining differs from things in other categories.</i>
Describe	<i>Recount, characterise, sketch or relate in sequence or story form.</i>
Discuss	<i>Examine and analyse carefully, giving reasons pro and con, advantages and disadvantages. Be complete, and give details. You must consider all sides of the issue and reach a balanced conclusion.</i>
Enumerate	<i>State in list or outline form, giving points concisely one by one.</i>
Evaluate	<i>Carefully appraise the matter in hand, citing both advantages and limitations. Emphasise the views of authorities as well as your personal estimation.</i>
Explain	<i>Clarify, interpret and spell out the material you present. Give reasons for important features or developments, and try to analyse causes.</i>

WORD	DEFINITION/MEANING
How far...	Similar to questions based on the “To what extent...” approach. Here you are expected to make your case or present your material in the usual way.
Illustrate	Use specific examples, allusions, figures or diagrams to explain, demonstrate or clarify a problem, situation or view.
Interpret	Translate, give examples of, express in simple terms or comment on a subject, usually giving your judgement about it.
Justify	Prove, make out a case or give reasons for decisions or conclusions, taking pains to be convincing.
List	As in ‘enumerate’, write an itemised series of concise statements.
Outline	Provide a framework describing under main point and subordinate points, omitting minor details and stressing the arrangement or classification of the material.
Prove	Establish that something is true by citing factual evidence or giving clear reasons.
Relate	Show how things are related to or connected with each other, or how one causes another, correlates with another, or is like another.
Review	Examine a subject critically, analyzing and commenting on the important points and stages of development.
State	Present the main points in brief, clear sequences.
Summarise	Give the main points or facts in condensed form, omitting details and illustrations.
Trace	Describe in narrative form, progress, development or sequence of events from some point of origin.

Western Zone Office  
13 March 2009

**CARIBBEAN EXAMINATIONS COUNCIL  
ADVANCED PROFICIENCY EXAMINATION**

**SPECIMEN PAPER  
MULTIPLE CHOICE QUESTIONS  
FOR**

**ECONOMICS  
UNIT 1**

***90 minutes***

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY.**

Each item in this test has four suggested answers lettered (A), (B), (C), (D). Read each item you are about to answer and decide which choice is best.

**Sample Item**

Prime cost is calculated by adding direct factory expenses to the

- (A) cost of goods sold
- (B) sale of fixed assets
- (C) sale of finished goods
- (D) cost of materials used

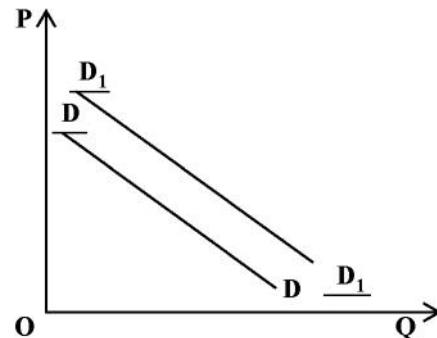
**Sample Answer**

- A
- B
- C
- D

The best answer to this item is “cost of materials used”, so answer space (D) has been shaded.

1. In one day Peter can produce EITHER ten kites OR five spinning tops. Each kite is sold for \$25.00 while each spinning top is sold for \$20.00. The opportunity cost of Peter not working, for three days is
  - (A) \$ 225.00
  - (B) \$ 300.00
  - (C) \$ 750.00
  - (D) \$1050.00
  
2. Which of the following is considered a limitation of marginal utility theory?
  - (A) Satisfaction cannot be quantified.
  - (B) Satisfaction increases as more of a good is consumed.
  - (C) Marginal utility falls as consumption increases.
  - (D) Total utility increases then decreases.
  
3. If a government wishes to regulate the housing market by preventing rents from rising, what action should it take?
  - (A) Set a price ceiling above the equilibrium price.
  - (B) Set a price ceiling below the equilibrium price.
  - (C) Impose a direct tax on landlords.
  - (D) Grant a subsidy to landlords.
  
4. Which of the following is a normative statement?
  - (A) Caribbean territories should be members of CSME.
  - (B) Free trade would increase standards of living.
  - (C) The CSME could increase wages and salaries.
  - (D) The CSME could stabilise exchange rates.

**Item 5** refers to the diagram below showing two demand curves representing ladies' trousers.



5. With reference to the diagram above, which of the following is MOST likely to have caused a shift of the demand curve from D to  $D_1$ ?
  - (A) An increase in population
  - (B) An increase in price of trousers
  - (C) A fall in sewing factory workers productivity
  - (D) An increased preference for skirts by women

**Item 6** refers to the following table showing a demand schedule before and after changes.

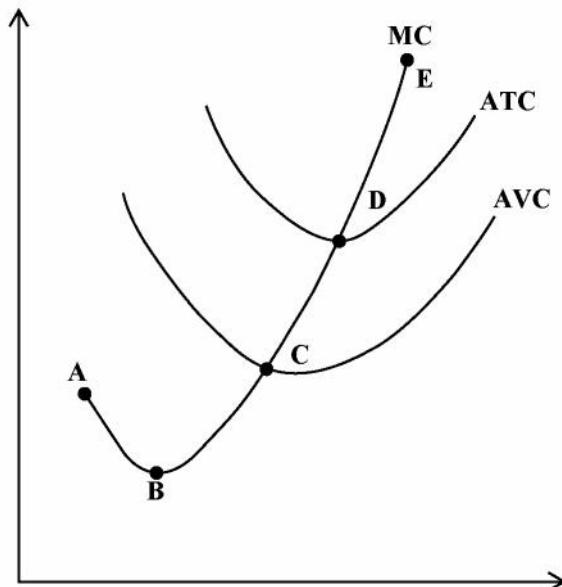
Good	Before		After	
	P\$	Qd	P\$	Qd
chicken sandwiches	3.00	60	2.00	80
hot dogs	1.00	30	1.00	25

6. Based on the table above, what is the cross elasticity of demand for hot dogs with respect to a change in the price of chicken sandwiches?
  - (A) -2
  - (B) +2
  - (C)  $-\frac{1}{2}$
  - (D)  $+\frac{1}{2}$

7. The BEST factor combination for a firm operating at least cost would be

- (A)  $\frac{MPP_a}{P_b} = \frac{MPP_b}{P_a}$
- (B)  $\frac{P_a}{MRP_b} = \frac{P_b}{MRP_a}$
- (C)  $\frac{MPP_a}{P_a} = \frac{MPP_b}{P_b}$
- (D)  $\frac{MRP_a}{P_a} = \frac{MRP_b}{P_b}$

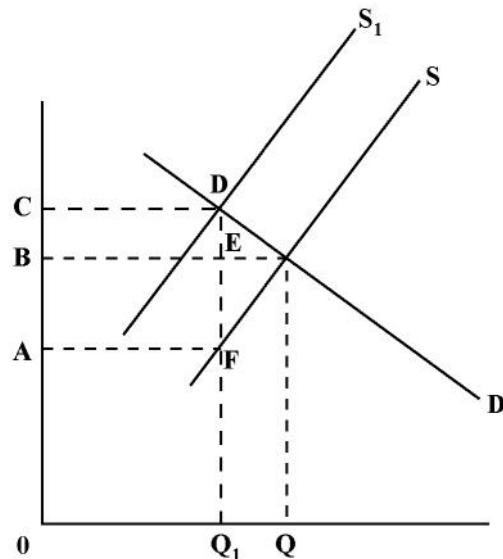
Item 8 refers to the diagram below which represents a firm operating under perfect competition.



8. Which of the following segments represents the short run supply of the firm?

- (A) DE
- (B) CE
- (C) BE
- (D) AE

Items 9 - 10 refer to the following diagram showing a change in supply after a fixed tax was imposed.



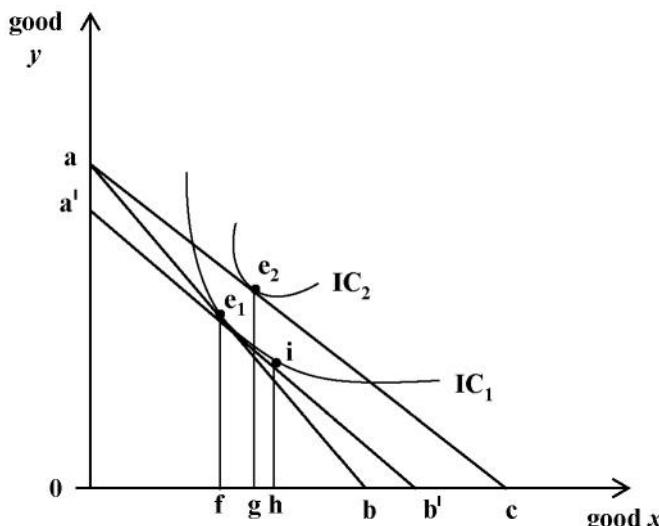
9. The portion of the tax paid by the seller of the commodity is given as

- (A) AB<sub>E</sub>F
- (B) ACDE
- (C) ACDF
- (D) BCDE

10. The portion of the tax paid by the buyer of the commodity is given as

- (A) BCDE
- (B) ACDF
- (C) ACDE
- (D) AB<sub>E</sub>F

Items 11 - 13 refer to the diagram below.



11. In the above diagram ab is the consumer initial budget line. The price of x falls and the budget line pivots to  $a'b'$ . What is the income effect of this price change?

- (A) fg
- (B) fh
- (C) hb
- (D) hg

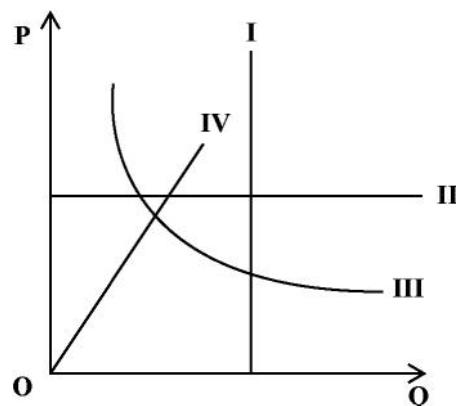
12. What kind of good is x?

- (A) A normal good
- (B) An ostentatious good
- (C) An inferior and giffen good
- (D) An inferior but not a giffen good

13. Which of the following statements is TRUE about the diagram above?

- (A) The negative income effect outweighs the negative substitution effect.
- (B) The negative substitution effect outweighs the negative income effect.
- (C) The income effect is positive.
- (D) The substitution effect is positive.

Item 14 refers to the diagram below showing four supply curves.



14. Which of the supply curves in the diagram above shows a price elasticity of supply of unity?

- (A) I
- (B) II
- (C) III
- (D) IV

15. Elasticity of supply tends to be

- (A) less elastic in the long run
- (B) more elastic in the long run
- (C) less inelastic in the short run
- (D) more inelastic in the long run

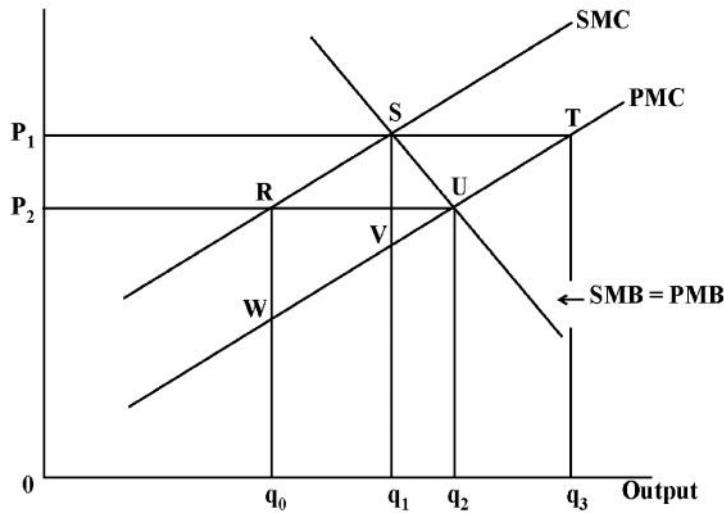
16. The horizontal demand curve of the firm is found under conditions of

- (A) oligopoly
- (B) monopoly
- (C) perfect competition
- (D) monopolistic competition

17. The demand curve for firms in oligopolistic markets can be described as 'kinked'. This suggests that firms will

- (A) sell their output in two different markets
- (B) face elastic demand above and inelastic demand below the current market price
- (C) ignore price cuts initiated by rival firms but follow price increases
- (D) face inelastic demand above and elastic demand below the current market price

**Items 18 - 19** refer to the diagram below which shows private and social costs of a firm.



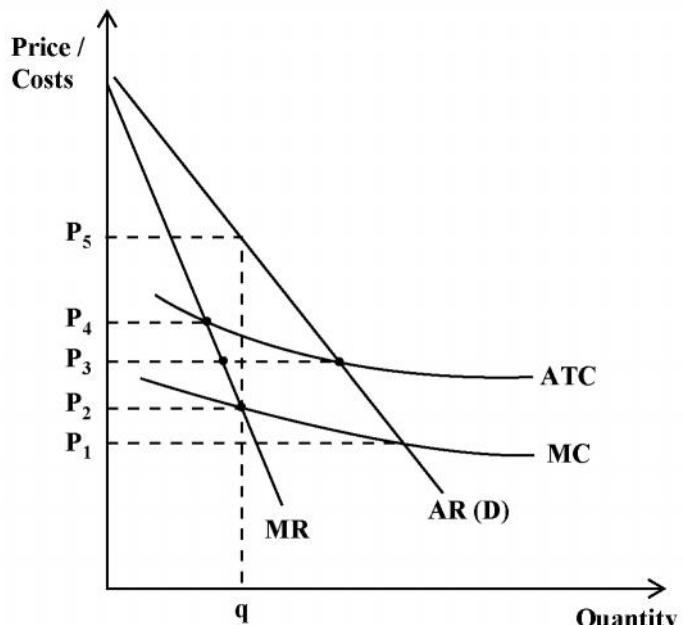
18. The competitive output of the firm is

- (A)  $oq_0$
- (B)  $oq_1$
- (C)  $oq_2$
- (D)  $oq_3$

19. In the diagram above, the external marginal cost is

- (A) RU
- (B) ST
- (C) SV
- (D) UT

**Item 20** refers to the diagram below which illustrates the cost and revenue curves of a monopoly.



20. If the aim of the government is to achieve allocative efficiency, then the regulatory commission can impose the legal price of

- (A)  $P_1$
- (B)  $P_3$
- (C)  $P_4$
- (D)  $P_5$

21. A government grants a subsidy with the aim of encouraging consumption of Good X. At the same time the government taxes Good Y to discourage consumption. Goods X and Y can be categorised as

	Good X	Good Y
(A)	public	merit
(B)	merit	demerit
(C)	demerit	merit
(D)	public	demerit

22. With Deregulation what role does Government play in resource allocation?
- (A) Lesser role  
(B) Greater role  
(C) Does not change  
(D) Performs all function
23. Regulation has affected the efficient running of an industry by
- (A) allowing the free flow of market forces to determine price  
(B) forcing prices to be either higher or lower than a free market  
(C) creating motivating incentives for greater productivity and efficiency  
(D) allowing management to freely determine factor prices
24. If government regulation takes place, what will be the effect on price and output of a monopoly?
- (A) Both price and output will fall.  
(B) Both price and output will rise.  
(C) Price will fall and output will rise.  
(D) Price will rise and output will fall.
25. The oligopoly firm faces a kinked demand curve because firms
- (A) do not respond to price increases but follow price cuts of other firms in the industry  
(B) respond to price increases but do not follow price cuts of other firms in the industry  
(C) determine price by following the prices set by the dominant firm  
(D) collude to set prices and limit competition
26. The MAIN drawback of regulating a monopoly is that the firm
- (A) becomes inefficient  
(B) ceases to be a monopoly  
(C) ceases production immediately  
(D) can make losses in the short run
27. One MAJOR cause of privatization is the failure of
- (A) the public service to produce goods and services  
(B) the private sector to achieve productive and allocative efficiencies  
(C) nationalised industries to achieve productive and allocative efficiencies  
(D) businesses to produce goods and services
28. The concept of ‘adverse selection’ implies that
- (A) those who have insurance may tend to be less cautious and thus increase risk  
(B) those who take out insurance are those who have the highest risk  
(C) those who sell insurance policies are better informed than those who buy them  
(D) those who refuse insurance policies are often the ones who really need them

29. Harry drives to and from work daily. He is usually a very safe driver. Because of his accident free record, he was offered a life insurance policy with a reputable insurance company, which he accepted. Subsequently, Harry began to drive recklessly. What problem did the insurance company encounter?

- (A) Moral hazard
- (B) Market failure
- (C) Adverse selection
- (D) Asymmetric information

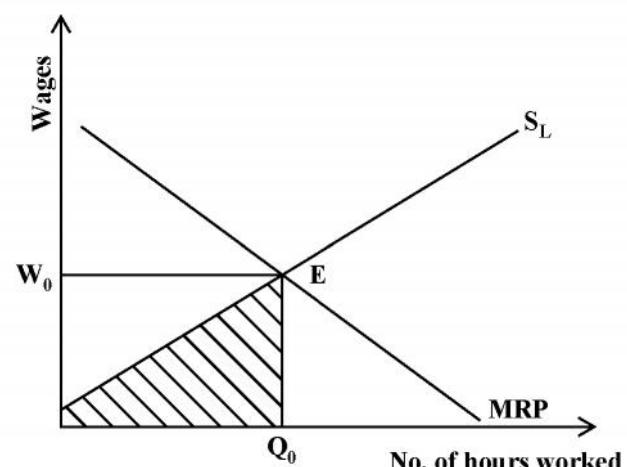
30. The current output of a perfectly competitive firm is where marginal cost is less than marginal revenue. In order to maximize profit this firm must

- (A) increase output and price
- (B) decrease output and increase price
- (C) decrease output and maintain price
- (D) increase output and maintain price

31. Which of the following is explained by the Theory of Income Distribution?

- (A) How wages and salaries are distributed among income earners
- (B) How factor rewards are allocated to the factors of production
- (C) Government's attempt to address the problem of income inequalities
- (D) Income earner's efforts to increase their incomes

Item 32 refers to the following graph which depicts the demand for and supply of labour.



32. The shaded area in the graph above represents

- (A) economic rent
- (B) transfer earnings
- (C) producers' surplus
- (D) marginal revenue product

33. A country's labour supply can be measured by the number of

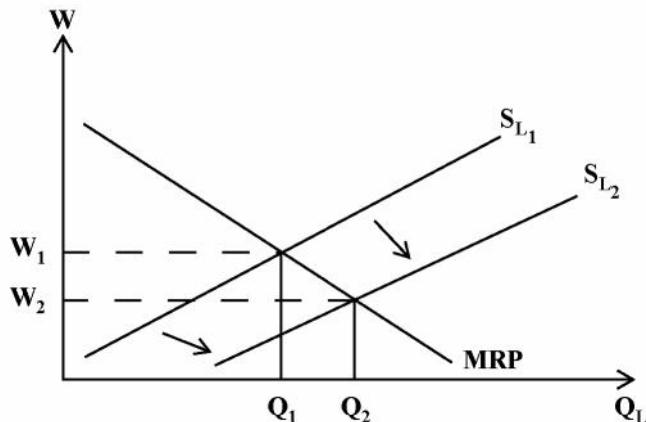
- (A) hours workers work at a given wage
- (B) workers willing and able to work at a given wage
- (C) workers entering the potential labour force at a given wage
- (D) workers employed at a given wage

34. The 'minimum level of income required to satisfy basic needs' refers to

- (A) general poverty
- (B) relative poverty
- (C) the poverty line
- (D) absolute poverty

35. Rent and wages are alike in that they are both
- factor inputs
  - factor outputs
  - factor rewards
  - factors of production
36. Which of the following measures can be used by government to reduce poverty?
- Transfer payments to the vulnerable
  - A depreciation of the country's currency
  - Subsidies to producers in the country
  - The introduction of VAT on selected items
- (A) I and II only  
 (B) I and III only  
 (C) I and IV only  
 (D) I, II and III only
38. When examining the Lorenz Curve, a Gini coefficient of 100% refers to complete
- employment in the country
  - equality of income distribution
  - inequality of income distribution
  - separation of the rich and the poor
39. Social welfare is maximized when society's resources are allocated so that social marginal cost
- equals social marginal benefit
  - equals private marginal benefit
  - is less than social marginal benefit
  - is greater than social marginal benefit

Item 37 refers to the graph below depicting the situation in the labour market of HappyLand.



37. Which of the following situations could have caused the changes in the labour market?
- A fall in living standard in HappyLand
  - Political instability in nearby countries
  - An increase in wages in nearby countries
  - A worsening crime situation in HappyLand

40. What type of income distribution is depicted in the table?
- |          |     |
|----------|-----|
| Rent     | 25% |
| Wages    | 50% |
| Interest | 15% |
| Profit   | 10% |
- Size
  - Unequal
  - Personal
  - Functional

Items 41 - 43 refer to the information below.

Jack's Inc. paid wages in the amount of \$20 000, rent and interest \$1 500. The business realized a profit of \$5 000.

41. For the factor of production, labour, how much did Jack's Inc. pay?

- (A) \$ 1 500
- (B) \$ 2 000
- (C) \$ 5 000
- (D) \$20 000

42.

For the factor of production, capital, how much did Jack's Inc pay?

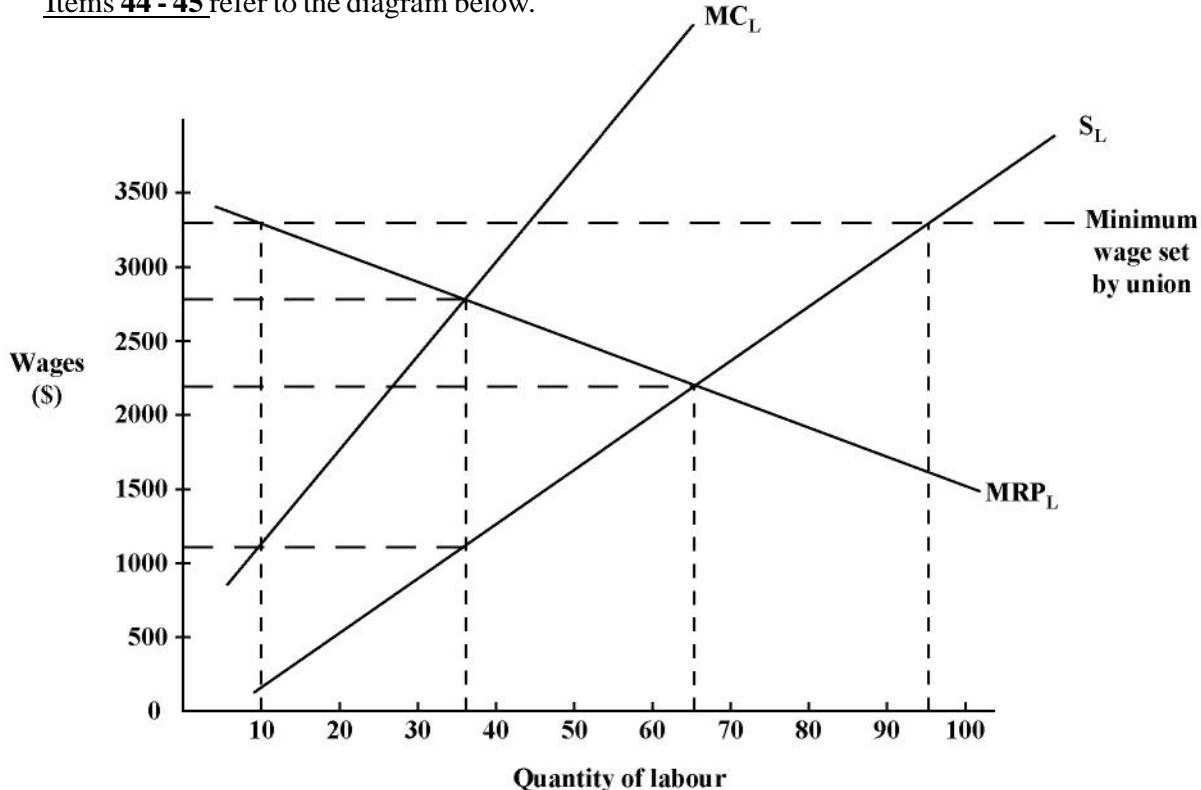
- (A) \$ 1 500
- (B) \$ 2 000
- (C) \$ 5 000
- (D) \$20 000

43.

For the factor of production, entrepreneurship, how much did Jack's Inc. pay?

- (A) \$ 1 500
- (B) \$ 2 000
- (C) \$ 5 000
- (D) \$20 000

Items 44 - 45 refer to the diagram below.



44. How many workers will the perfectly competitive firm employ?

- (A) 10 workers
- (B) 35 workers
- (C) 66 workers
- (D) 95 workers

45.

Assume the union intervenes in the market and sets a minimum wage of \$3 300. How many workers will the perfectly competitive firm employ?

- (A) 10 workers
- (B) 35 workers
- (C) 66 workers
- (D) 95 workers

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

# FORM TP 02116020/SPEC /2010

CARIBBEAN EXAMINATIONS COUNCIL

ADVANCED PROFICIENCY EXAMINATION

ECONOMICS

SPECIMEN PAPER

UNIT 1

PAPER 02

*2 ½ hours*

## INSTRUCTIONS TO CANDIDATES

1. This paper consists of **THREE** sections.
2. Each section consists of **TWO** questions. Candidates **MUST** answer **THREE** questions, **ONE** from **EACH** section.
3. Answers for **ALL** questions must be written in the answer booklet provided.
4. Candidates may use silent non-programmable calculators.

## Examination Materials

Mathematical formulae and tables  
Electronic calculator  
Ruler and graph paper

## SECTION 1

**Answer ONE question from this section.**

1. (a) Distinguish between normal good and inferior good. **(4 marks)**
- (b) Use the indifference curve approach to explain consumer equilibrium. **(12 marks)**
- (c) Show, with the aid of a diagram, the income and substitution effect of a fall in price. **(9 marks)**

**Total 25 marks**

2. (a) (i) The table below shows Total Product, Average Product and Marginal Product for six units of labour. Complete the table. **(3 marks)**

<b>Unit of Labour</b>	<b>Total Product (TP)</b>	<b>Average Product (AP)</b>	<b>Marginal Product (MP)</b>
1	5	5	5
2	15	7.5	-
3	-	10	15
4	-	12.5	-
5	68	-	18
6	78	-	10

- (ii) Use the completed table to construct a graph showing the Average Product (AP) and Marginal Product (MP) curves. **(5 marks)**
- (b) Define 'Marginal Product' and 'Average Product' and explain the relationship between them. **(7 marks)**
- (c) Use the Short Run Average Total Cost (SRATC) and the Long Run Average Total Cost (LRATC) curves to distinguish between the Law of Diminishing Returns and Returns to Scale. **(10 marks)**

**Total 25 marks**

## SECTION 1I

**Answer ONE question from this section**

3. (a) (i) Define the term ‘externality’. **(2 marks)**
- (ii) Give ONE example of a positive externality and ONE example of a negative externality. **(2 marks)**
- (b) (i) Explain what is meant by the term ‘market failure’. **(2 marks)**
- (ii) Show graphically how a monopoly and merit goods contribute to market failure. **(10 marks)**
- (c) Evaluate THREE measure that the government can use to correct market failure caused by monopoly. **(9 marks)**
4. (a) Distinguish between ‘normal profit’ and ‘abnormal profit’. **(4 marks)**
- (b) (i) State TWO characteristics of the monopolistic competitive market structure. **(2 marks)**
- (ii) Draw a diagram of a firm in monopolistic competition earning abnormal profits in the short run. Shade the area that represents the abnormal profit earned. **(6 marks)**
- (iii) Explain what will happen to the abnormal profit of the firm in monopolistic competition in the long run. Give ONE reason to justify your answer. **(5 marks)**
- (c) Compare the long run situation of a firm in a monopolistic competition with that of a firm in perfect competition by referring to the type of profits earned, the entry and the productive efficiency of firms. **(8 marks)**

**Total 25 marks**

### SECTION III

**Answer ONE question from this section**

5. (a) Explain, using a suitable example, the ‘least cost rule’ in the marginal productivity theory of demand for labour and capital. **(6 marks)**
- (b) (i) Explain how Marginal Revenue Product is calculated. **(2 marks)**
- (ii) Given that labour and capital are hired in a purely competitive market and the price of labour is \$16, the price of capital is \$8, and the product is sold for \$2, complete the table below.

<b>Quantity of Labour</b>	<b>Total Product of Labour</b>	<b>Marginal Revenue Product of Labour</b>	<b>Quantity of Capital</b>	<b>Total Product of Capital</b>	<b>Marginal Revenue Product of Capital</b>
0	0		0	0	
1	10		1	12	
2	24		2	20	
3	38		3	27	
4	46		4	32	
5	49		5	36	

**(6 marks)**

- (iii) State the rule for profit maximizing for the employment of factors of production. **(2 marks)**
- (iv) Use the information in the completed table to identify the profit maximizing quantity of labour and capital that will be employed. Explain your answer. **(4 marks)**
- (c) Discuss ONE limitation of the Marginal Productivity Theory. **(5 marks)**

**Total 25 marks**

6. (a) (i) Distinguish between size distribution of income and functional distribution of income. **(4 marks)**
- (ii) Explain, using a suitable diagram of the Lorenz Curve, how income inequality is measured. **(5 marks)**
- (iii) Discuss TWO measures that government can use to reduce income inequality. **(4 marks)**
- (b) (i) Identify TWO categories of persons who are more susceptible to poverty. **(2 marks)**
- (ii) Outline One reasons why EACH category is susceptible to poverty. **(4 marks)**
- (iii) Assess the economic benefits of TWO strategies used by government to alleviate poverty. **(6 marks)**

**Total 25 Marks**

**END OF TEST**

**CARIBBEAN EXAMINATIONS COUNCIL  
ADVANCED PROFICIENCY EXAMINATION**

**SPECIMEN PAPER  
MULTIPLE CHOICE QUESTIONS  
FOR**

**ECONOMICS  
UNIT 2**

***90 minutes***

**READ THE FOLLOWING INSTRUCTIONS CAREFULLY.**

Each item in this test has four suggested answers lettered (A), (B), (C), (D). Read each item you are about to answer and decide which choice is best.

**Sample Item**

Prime cost is calculated by adding direct factory expenses to the

**Sample Answer**

- (A) cost of goods sold
- (B) sale of fixed assets
- (C) sale of finished goods
- (D) cost of materials used

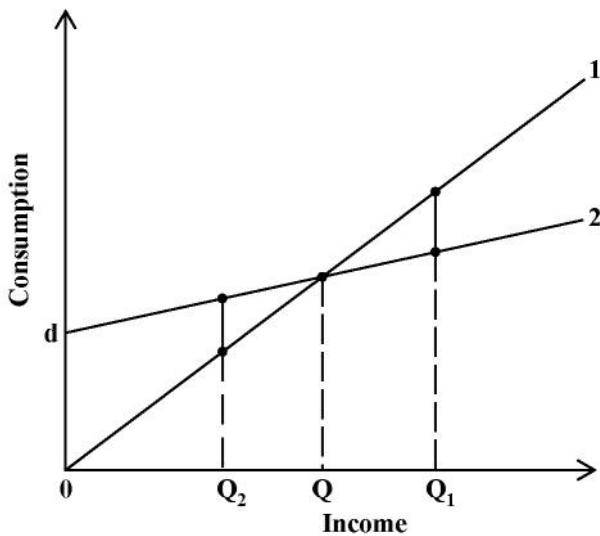
(A)  (B)  (C)  (D)

The best answer to this item is “cost of materials used”, so answer space (D) has been shaded.

1. In Keynesian analysis, if the economy is at full employment then an increase in aggregate expenditure will lead to

- (A) a fall in economic growth
- (B) an increase in the price level
- (C) a fall in government spending
- (D) an increase in the exchange rate

Items 2 - 3 refer to the following diagram showing consumption and income.



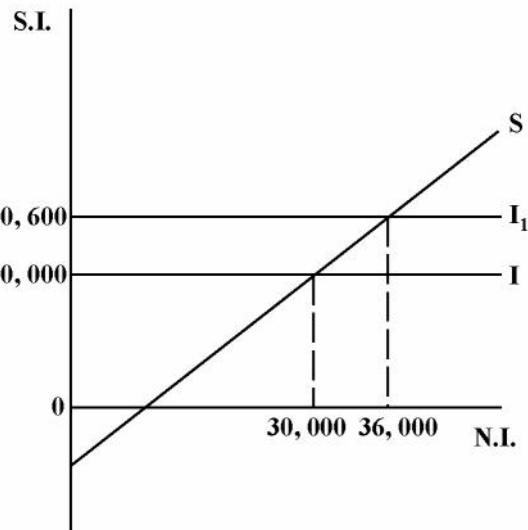
2. What function does line 2 represents?

- (A) Savings
- (B) Investment
- (C) Consumption
- (D) Government expenditure

3. What does line 1 represent?

- (A) The 45° line
- (B) National income
- (C) Investment spending
- (D) Autonomous savings

**Item 4** refers to the following diagram showing the relationship between National Income (NI) and Saving/Investment (S.I.).



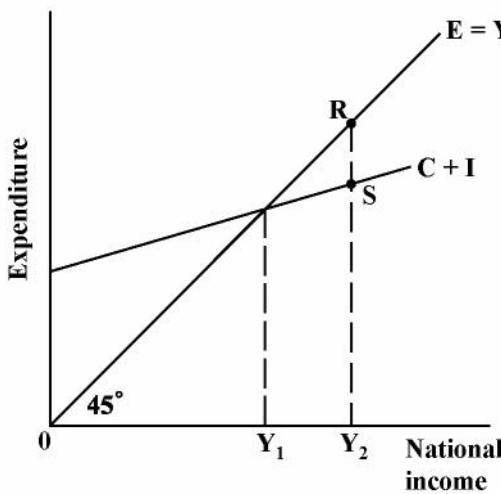
4. The diagram shows that national income has increased from \$30 000 million to \$36 000 million. What is the marginal propensity to consume?

- (A) 0.1
- (B) 0.9
- (C) 0.29
- (D) 10

5. If consumption increases by 0.6% of the change in national income, then the multiplier is

- (A) 0.4
- (B) 0.6
- (C) 1.6
- (D) 2.5

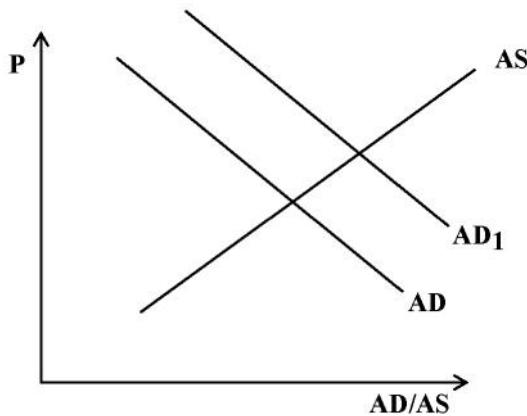
Item 6 refers to the following diagram of a two-sector closed economy.



6. In the diagram, RS represents

- (A) an inflationary gap
- (B) a deflationary gap
- (C) money saved by firms in the banks
- (D) interest payments on investment loans

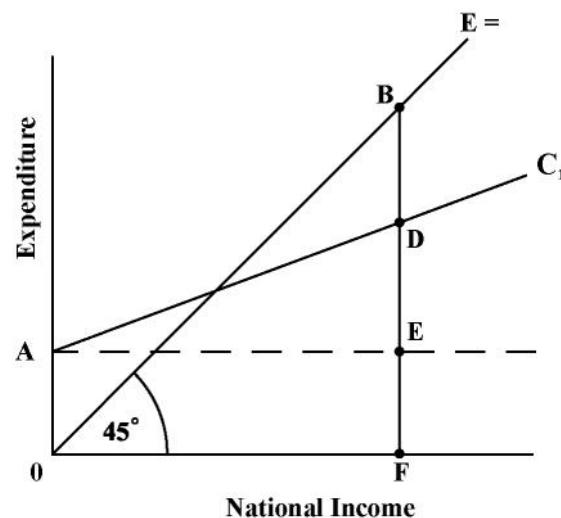
Item 7 refers to the following demand and supply curve.



7. Which of the following factors may cause AD to shift to  $AD_1$ ?

- (A) Government imposing taxes on citizens
- (B) The Central Bank increasing interest rates
- (C) An increase in government expenditure
- (D) Increased speculation in the stock market

Item 8 - 9 refer to the diagram below showing a consumption function  $AC_1$ .



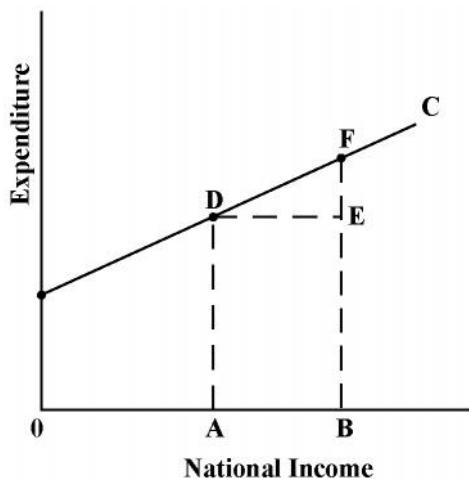
8. What does  $\frac{DF}{BF}$  represent?

- (A) Autonomous consumption
- (B) Total induced consumption
- (C) Marginal propensity to consume
- (D) Average propensity to consumers

9. When national income is at OF, what does DE represent?

- (A) Induced consumption
- (B) Autonomous consumption
- (C) Consumption minus savings
- (D) Average propensity to consumer

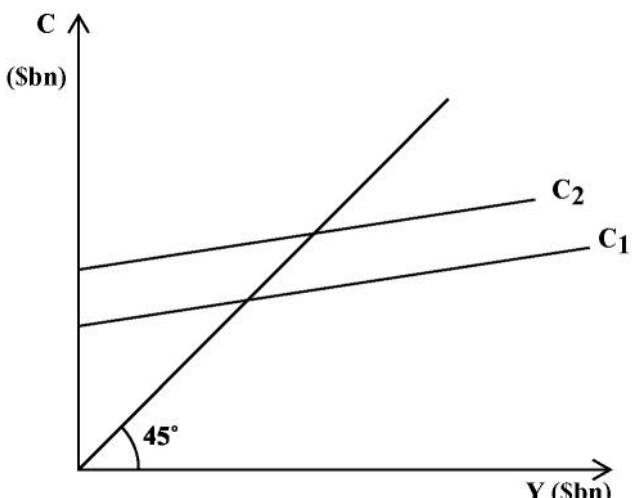
**Item 10** refers to the diagram below showing a consumption function.



10. Which of the following represents the marginal propensity to consume?

- (A)  $\frac{FE}{AB}$
- (B)  $\frac{FE}{AB}$
- (C)  $OB - AB$
- (D)  $DE + EF$

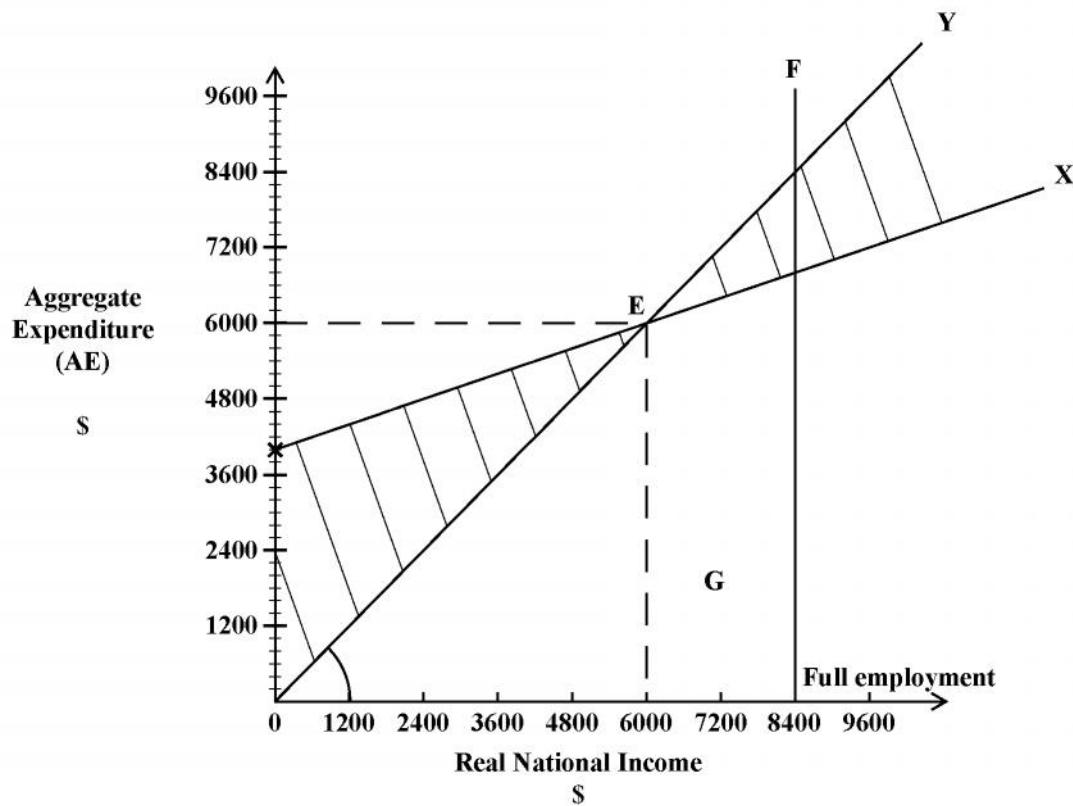
**Item 11** refers to the following diagram showing the consumption function  $C_1$  in country X.



11. What causes the consumption function to shift upwards from  $C_1$  to  $C_2$ ?

- (A) An increase in direct taxation
- (B) An increase in interest rates
- (C) The anticipated increase in the proportion of income saved by households
- (D) The expectation of an increase in the rate of value added tax

Items 12 - 15 refer to the diagram below showing equilibrium level of national income.



12. What is the equilibrium level of income?

- (A) \$3 600
- (B) \$4 000
- (C) \$6 000
- (D) \$8 400

13. Which of the following responses correctly identifies the lines labelled Y and X respectively?

- (A) Income line and  $45^\circ$  line
- (B)  $45^\circ$  line and consumption function
- (C) Income line and consumption function
- (D)  $45^\circ$  line and aggregate expenditure line

14. How much is autonomous expenditure?

- (A) \$1 200
- (B) \$2 400
- (C) \$3 600
- (D) \$3 800

15. By how much would aggregate desired expenditure have to be increased to close the output gap?

- (A) \$ 0
- (B) \$1 200
- (C) \$2 400
- (D) \$6 000

16. A worker uses money to pay cash for a dress which costs \$200.

Which of the following functions of money are being addressed in the above statement?

- (A) A medium of exchange and a store of value
- (B) A unit of account and a standard for deferred payments
- (C) A standard for deferred payments and a store of value
- (D) A medium of exchange and a unit of account

17. Which of the following is a monetary policy measure?

- (A) Fall in taxation
- (B) Fall in government spending
- (C) Rise in government spending
- (D) An increase in the reserve ratio

18. Which of the following activities undertaken by the Central Bank BEST defines 'open market operations'?

- (A) Issues long-term securities and fewer short-term securities, thereby reducing the banks' liquid assets
- (B) Sells government securities, reducing the banks' liquid assets and raising interest rates
- (C) Sets an upper limit on the volume of bank lending, reducing banks' liquid assets and rasing interest rates
- (D) Issues compulsory loans that are demanded from the banks thereby reducing their liquid assets

- 19.

The Central Bank sells government securities using open market operations. What effect will this have on the interest rate and the money supply?

- (A) Interest rate falls, money supply rises.
- (B) Interest rate falls, money supply falls.
- (C) Interest rate rises, money supply falls.
- (D) Interest rate rises, money supply rises.

- 20.

Which of the following fiscal prescriptions would Keynes MOST likely have increased to alleviate unemployment?

- (A) Taxes
- (B) Interest rates
- (C) Aggregate supply
- (D) Government expenditure

- 21.

What is the role of automatic stabilizers in economic development?

- (A) Reduce inflation in a country
- (B) Protect and insulate the economy from internal shocks
- (C) Boost and develop the economy as it so needs
- (D) Help to stabilise a country's balance of payments

- 22.

If a government borrows to finance the budget deficit by selling treasury bills, what is the likely effect on the economy?

- (A) Inhibits private sector investment
- (B) Exchange rate will depreciate
- (C) Money supply will expand
- (D) Interest rates will fall

- 23.

The national debt will be a burden to a country if it is

- (A) owed to foreigners
- (B) held in domestic currency
- (C) owed to citizens of the country
- (D) rescheduled to repay at a later period

24. According to the monetarists, inflation is caused by an increase in
- (A) taxes  
(B) the money supply  
(C) aggregate demand  
(D) the cost of production
25. If there is a positive change in real GDP *ceterus paribus*, what would be the effect on money demand, interest rates and money supply?
- (A) The demand for money falls, interest rates fall, money supply falls.  
(B) The demand for money remain the same, interest rates fall, money supply rises.  
(C) The demand for money rises, interest rates rise, money supply remains the same.  
(D) The demand for money rises, interest rates remain the same, money supply remains the same.
26. Using the quantity theory of money, what is the velocity of circulation if the money supply is \$50 000, the average price is \$200 and the number of transactions in the economy for a given year is 10 000?
- (A) 25  
(B) 40  
(C) 50  
(D) 100
27. Which of the following is an example of qualitative controls that a Central Bank may use in executing its monetary policy?
- (A) Moral suasion  
(B) Adjusting the bank rate  
(C) Open market operations  
(D) Variation of the liquidity ratio
28. If a government wishes to reduce unemployment by increasing demand, what type of monetary policy should it adopt?
- (A) Lower the interest rate  
(B) Sell fewer treasury bills  
(C) Increase the interest rate  
(D) Sell more government securities
29. The money multiplier is the
- (A) number of times money changes hands in an economy  
(B) change in money supply multiplied by the change in deposit that brought it about  
(C) change in money supply divided by the change in deposit that brought it about  
(D) amount by which a currency has to be multiplied to find the value of another currency
30. Which of the following BEST defines the government's budget?
- (A) The spending plans of government in an economy in a year  
(B) The annual report of the allocation of government spending among sectors  
(C) A yearly statement of government's plans for spending and tax revenues  
(D) The amount of income government has to spend in a year
31. Which of the following changes is the BEST indicator of sustained economic growth in a developing country?
- (A) A decrease in unemployment  
(B) An increase in the use of capital  
(C) A movement within the production possibility frontier  
(D) An outward shift in the production possibility frontier

GO ON TO THE NEXT PAGE

- 32.** The table below shows the ability of two countries to produce two commodities.

Country	Production of tiles per person	Production of drums per person
Barbados	500	1000
Trinidad	750	1000

Which of the following statements correctly represents the information in the table?

- (A) Barbados has a comparative advantage in drums and Trinidad has an absolute advantage in tiles.
- (B) Barbados has an absolute advantage in drums and Trinidad has an absolute advantage in tiles.
- (C) Barbados has an absolute advantage in drums and Trinidad has a comparative advantage in tiles.
- (D) Barbados has a comparative advantage in tiles and Trinidad has an absolute advantage in drums.

- 33.** Which of the following are structural characteristics of Caribbean economies?

- I. Economic independence
  - II. The chronic shortage of capital
  - III. The lack of a diversified production base
  - IV. The lack of openness in the economy
- (A) I and II only
  - (B) I and IV only
  - (C) II and III only
  - (D) III and IV only

- 34.** Developing countries may attempt to increase their levels of exports by setting up

- I. Trade Barriers
- II. Custom Unions
- III. Common Markets
- IV. Free Trade Areas

- (A) I, II and III only
- (B) I, II and IV only
- (C) I, III and IV only
- (D) II, III and IV only

- 35.** The data in the table below refer to the balance of payments of a country.

Item	\$ Millions
Import of goods	10,000
Export of goods	8,000
Invisible balance	+600
Investment and other capital flows	+100

What is the Current Account Balance?

- (A) \$2 700 m
- (B) \$2 600 m
- (C) -\$1 400 m
- (D) -\$1 300 m

- 36.** Which of the following measures would BEST rectify a deficit on a country's Balance of Payments Account?

- (A) Revaluing the currency
- (B) Lowering tariff barriers
- (C) Deflationary fiscal policy
- (D) Relaxing exchange controls

37. One MAJOR advantage of a floating exchange rate over a fixed exchange system is that it

- (A) is determined by the Central Bank
- (B) helps to reduce inflation in a country
- (C) can lead to unstable currency value
- (D) provides certainty in international trade

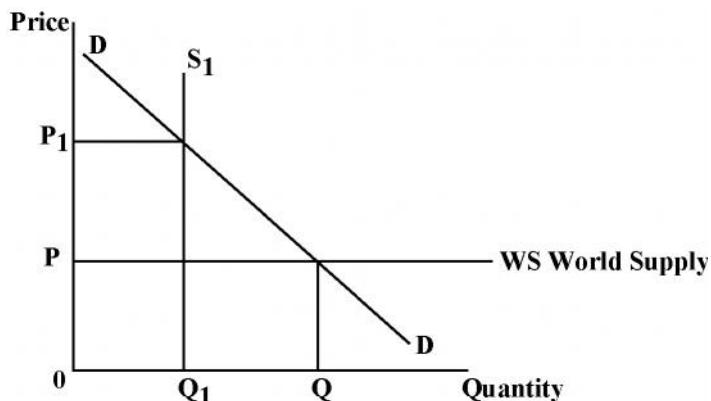
38. What is the MAIN function of the World Trade Organisation?

- (A) To promote trade with the large countries of the world
- (B) To set maritime boundaries for member countries
- (C) To settle disputes amongst members
- (D) To set rules for the global trading system

39. Which of the following policies may frustrate a government's attempt to stimulate growth in an economy?

- (A) Increasing Government spending
- (B) Reducing direct and indirect taxes
- (C) Increasing the rate of interest
- (D) Increasing the money supply

Item 40 refers to the following diagram representing the demand for imports of Good A into Country B.



40. Assuming a perfectly elastic world supply. What are the effects on price and quantity imported should government impose a quota at  $S_1$ ?

- (A) Price decreases; quantity demanded decreases.
- (B) Price decreases; quantity demanded increases.
- (C) Price increases; quantity demanded increases.
- (D) Price increases; quantity demanded decreases.

41. Which of the following BEST describes a Customs Union?

- (A) Member countries act as a single market with free movement of labour and capital.
- (B) Member countries face no trade barriers between themselves while external tariffs and quotas are common.
- (C) Member countries face no trade barriers between themselves and try to implement a common language.
- (D) Member countries have similar trading patterns and attempts are made to have similar trade unions.

42. Which of the following is MOST likely to cause a Balance of Payments Surplus in a country?

- (A) A decrease in the domestic inflation rate relative to other trading countries
- (B) Increased confidence in the particular economy by the international community
- (C) An increase in the domestic inflation rate relative to other trading countries
- (D) Lack of confidence in the particular economy by the international community

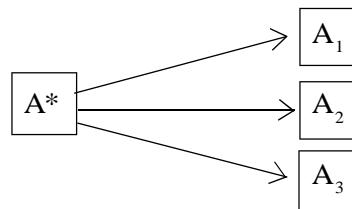
43. The foreign exchange market refers to the market in which

- (A) one good can be exchanged for another
- (B) the rate of interest is determined
- (C) buyers determine the price of goods
- (D) one currency can be traded for another

44. Which of the following BEST describes the term 'globalisation'?

- (A) The free movement of goods and services across national borders
- (B) The free movement of capital and labour across national borders
- (C) The increase in trade, communication, travel and information flows across countries
- (D) The independence of countries to produce goods and services and trade freely

Item 45 refers to the diagram below



45. A<sup>\*</sup> is a large firm producing cars in Metro Pole. The managers of A<sup>\*</sup> have set up plants A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub> in three foreign countries. The operations of A<sup>\*</sup> can BEST be described as that of

- (A) globalisation
- (B) economic integration
- (C) a multinational company
- (D) an internal financial organization

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

GO ON TO THE NEXT PAGE

**FORM TP 02216020/SPEC/2010**

**CARIBBEAN EXAMINATIONS COUNCIL**

**ADVANCED PROFICIENCY EXAMINATION**

**ECONOMICS**

**SPECIMEN PAPER**

**UNIT 2**

**PAPER 02**

***2½ hours***

**INSTRUCTIONS TO CANDIDATES**

1. This paper consists of **THREE** sections.
2. Each section consists of **TWO** questions. Candidates **MUST** answer **THREE** questions **ONE** from **EACH** section.
3. Answers for **ALL** questions must be written in the answer booklet provided.
4. Candidates may use silent non-programmable calculators.

**Examination Materials**

Mathematical formulae and tables

Electronic calculator

Ruler and graph paper

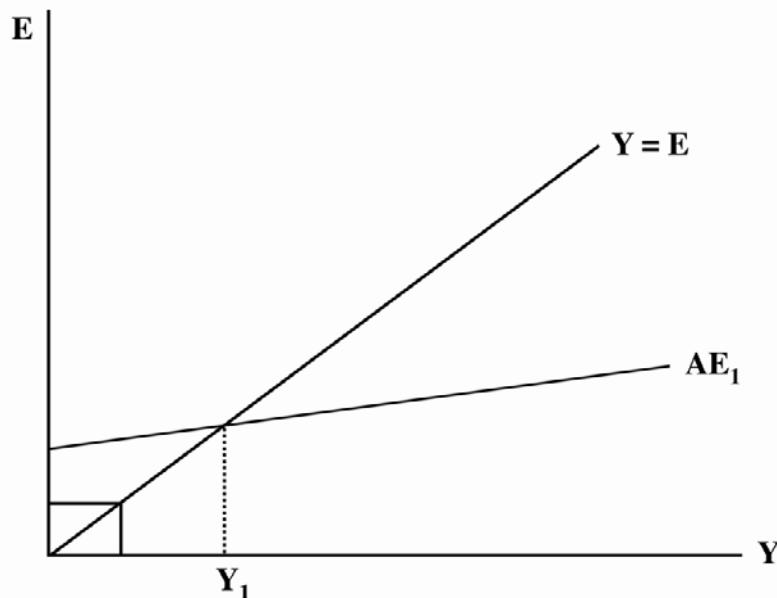
## SECTION I

**ANSWER ONE question from this section.**

- 1.** (a) Distinguish between EACH of the following:
- (i) Gross Domestic Product (GDP) and Gross National Product. (GNP) **(4 marks)**
  - (ii) Nominal GDP and Real GDP **(4 marks)**
- (b) A Caribbean territory has experienced a 4% growth in its Gross Domestic Product. Evaluate FOUR ways in which growth in the GDP may impact negatively on the standard of living of a country. **(12 marks)**
- (c) Justify whether GDP is an adequate measure of the standard of living of a country. **(5 marks)**

**Total 25 marks**

- 2.** (a) Define the term ‘injections’ as it relates to an economy. **(2 marks)**
- (b) Outline THREE reasons why injections will exceed withdrawals. **(6 marks)**
- (c) Discuss FOUR factors that would restore equilibrium. **(12 marks)**
- (d) The diagram below shows an economy operating in a situation where injections exceed withdrawals. **(5 marks)**



- (d) Explain, using the graph, what happens when equilibrium is restored. **(5 marks)**

**Total 25 marks**

## SECTION II

**ANSWER ONE question from this section.**

- 3.** (a) Explain the Phillips curve, with the aid of a diagram. **(8 marks)**
- (b) Explain why EACH of the following is likely to be of concern to a government:
- (i) Rising unemployment
  - (ii) High and rising rates of inflation **(12 marks)**
- (c) Justify whether the Phillips Curve is applicable to your country's economy. **(5 marks)**

**Total 25 marks**

- 4.** (a) (i) Distinguish between monetary policy and fiscal policy. **(4 Marks)**
- (ii) Distinguish between expansionary and contractionary monetary policy. **(4 marks)**
- (b) The Central Bank of a Caribbean territory is about to take measures to control the rate of inflation. Explain, using FOUR measures of monetary policy, how this objective might be achieved. **(12 marks)**
- (c) Discuss ONE limitation of using monetary policy to control inflation rates in your country. **(5 marks)**

**Total 25 marks**

## SECTION III

**ANSWER ONE question from this section.**

- 5.** (a) Outline TWO main components of sustainable development. **(4 marks)**
- (b) Identify FOUR structural characteristics of the Caribbean region. **(4 marks)**
- (c) Evaluate the impact of the region's structural characteristics on sustainable economic development. **(17 marks)**

**Total 25 marks**

- 6.** (a) Outline the FOUR main forms of economic integration. **(8 marks)**
- (b) Evaluate the costs and benefits of economic integration for the Caribbean. **(17 marks)**

**Total 25 marks**

**END OF TEST**

**TEST CODE :022160**

**FORM TP 02216030/SPEC 2010**

**C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L**

**ADVANCED PROFICIENCY EXAMINATION**

**ECONOMICS**

**UNIT 2**

**PAPER 03/2**

**SPECIMEN PAPER**

***2 hours***

**INSTRUCTIONS TO CANDIDATES**

1. This paper consists of **THREE** questions.
2. Candidates must answer **ALL** questions.
3. Answers for **ALL** questions must be written in the answer booklet provided.

**Answer ALL questions**

**Examination Materials**

Mathematical formulae and tables  
Electronic calculator  
Ruler and graph paper

**Answer ALL questions**

1. (a) State THREE reasons why multinational companies invest abroad. **(6 marks)**  
(b) Explain THREE ways in which the presence of Foreign Direct Investment impacts on the aggregate expenditure and equilibrium of a country. **(6 marks)**  
(c) Using Classical Theory, discuss unemployment in the Caribbean. **(8 marks)**

**Total 20 marks**

2. (a) (i) Define the term ‘national debt’. **(2 marks)**  
(ii) Outline TWO ways by which Foreign Direct Investment (FDI) flows by Multinational Companies (MNCs) may have a positive impact on a country’s National Debt. **(4 marks)**  
(b) Explain THREE ways by which fiscal policy in your country may discourage the presence of multinational companies and foreign direct investment. **(6 marks)**  
(c) Evaluate the impact of MNCs on employment in your country. **(8 marks)**

**Total 20 marks**

3. (a) Define EACH of the following terms giving ONE example of EACH:  
(i) Current Account  
(ii) Capital Account **(6 marks)**  
(b) Explain THREE ways by which FDI flows by MNCs impact negatively on the Caribbean. **(6 marks)**  
(c) Justify why FDI inflows are classified as Capital Account Transactions in the Balance Sheet. **(8 marks)**

**Total 20 marks**

**END OF TEST**

**CARIBBEAN EXAMINATIONS COUNCIL**

**SECONDARY EDUCATION CERTIFICATE  
EXAMINATION**

**ECONOMICS-UNIT 1**

**SPECIMEN PAPER 2010**

<b>Item No.</b>	<b>Key</b>
1	C
2	A
3	B
4	A
5	A
6	D
7	C
8	B
9	A
10	A
11	D
12	D
13	B
14	D
15	B
16	C
17	B
18	C
19	C
20	A
21	B
22	A
23	B

<b>Item No.</b>	<b>Key</b>
24	C
25	A
26	D
27	C
28	B
29	A
30	D
31	B
32	B
33	B
34	C
35	C
36	B
37	B
38	C
39	A
40	D
41	D
42	A
43	C
44	C
45	A

/CAPE/SPEC/MS/2010

**C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L**

**ADVANCED PROFICIENCY EXAMINATION**

**ECONOMICS**

**SPECIMEN PAPER**

**UNIT 1 - PAPER 02**

**ANSWER KEY  
AND  
MARK SCHEME**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 1**

(a) Differentiate between normal good and inferior good. (4 marks)

Indicating that a normal good has:

OR

- A positive relationship between income and quantity demanded.  
**K/C (1 mark)**

Indicating that interior good has:

OR

- A negative relationship between income and quantity demanded.  
**K/C (1 mark)**

Indicating that the differences are:

- For inferior good relationship between price and quantity demanded can be positive or negative while for normal goods it is only negative.

OR

- Relationship between income and quantity demanded is positive for normal and negative for inferior goods.

**K/C (2 mark)**

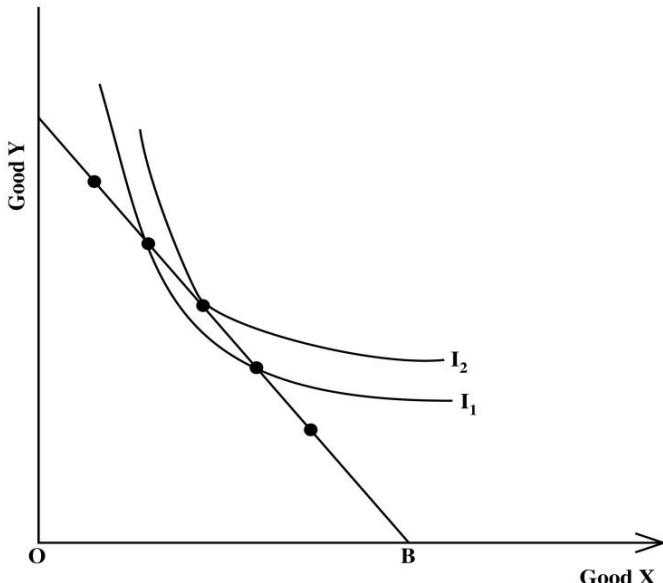
## ECONOMICS

## UNIT 1

## Key/MarK Scheme

(b) Use the indifference curve approach to explain consumer equilibrium.

(12 marks)



Labeling of axes: K/C 2 marks

Drawing MP curve: A/A 2 mark

Drawing budget line: A/A 1 mark

Identifying point of tangency: A/A 1 mark

- Stating that a budget line shows the combination of two goods a consumer can purchase if he spends his income.

K/C (1 mark)

- Stating that an indifference curve shows all possible combinations of two goods that give consumer equal level of satisfaction or utility.

K/C (1 mark)

- Indicating that the budget line shows combination of two goods a consumer can purchase while indifference curve shows combinations that yield the same level of satisfaction or utility.

A/A (2 marks)

- Stating that consumer equilibrium is the point of tangency between the budget line and indifference curve.

A/A (2 marks)

OR

- Indicating that at the point of tangency the consumer achieves maximum utility with given income.

A/A (2 marks)

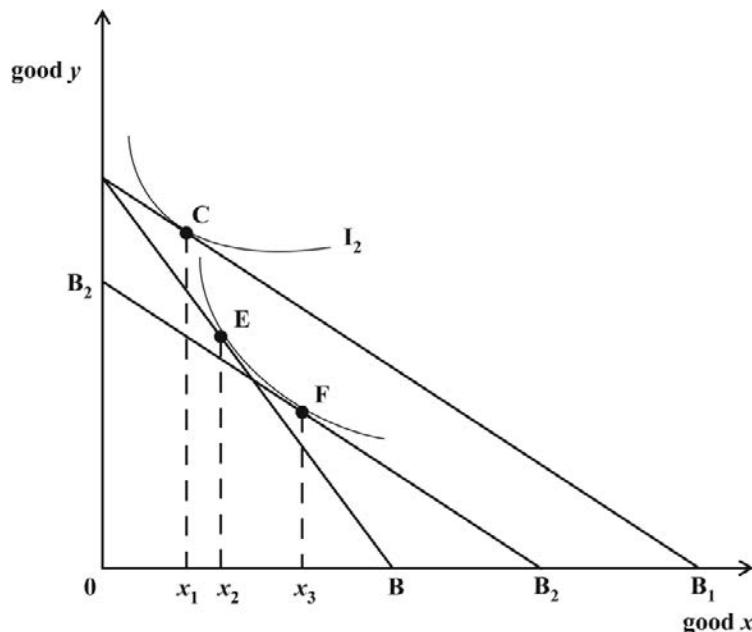
## ECONOMICS

## UNIT 1

## Key/Mark Scheme

- (c) With the aid of a diagram, show, the income and substitution of a fall in price

(9 marks)



- Showing original equal (point E) A/A (1 mark)
- Showing equilibrium because of price change (point C) A/A (1 mark)
- Pivoting of the budget line (B to B<sub>1</sub>) A/A (1 mark)
- Showing parallel downward shift from B<sub>1</sub> to B<sub>2</sub>) A/A (1 mark)
  
- Isolating and explaining the income and substitution effects.  
 X<sub>2</sub> to X<sub>3</sub> is the substitution effect as good is relatively cheaper, therefore increasing the quantity demanded.  
 X<sub>3</sub> to X<sub>1</sub> is the income effect as a fall in price increases real income resulting in a reduction in quantity demanded. E/S (3 marks)

Is the substitution effect as good is relatively cheaper, therefore increasing quantity demanded.

Is the income effect as a fall in price increased real income resulting in a reduction in quantity demanded.

- Categorizing the good as Giffen based on the negative income outweighing the negative substitution effect. S/E (2 marks)

Total 25 marks

## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 2

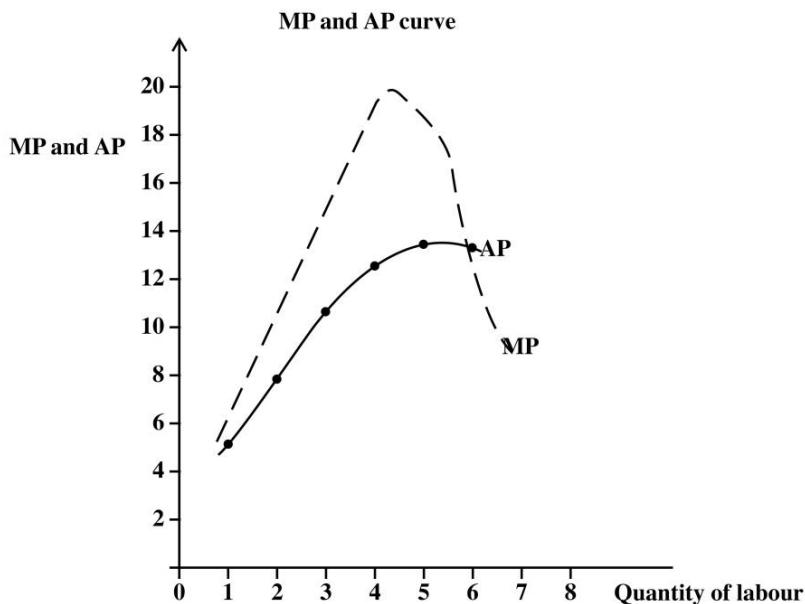
(a) (i) Complete the Table

Units of Labour	T.P	A.P.	M.P.
1	5	5	5
2	15	7.5	(10)
3	(30)	10	15
4	(50)	12.5	(20)
5	68	(13.6)	18
6	78	(13)	10

1-2 correct: A/A 1 mark  
 3-4 correct: A/A 2 marks  
 5-6 correct: A/A 3 marks

Total 3 marks

(ii) Use the completed table to construct a graph showing the Average Product (AP) and Marginal Product (MP) curves.



Labeling of axes: K/C 2 marks  
 Drawing MP curve: A/A 1 mark  
 Drawing AP curve: A/A 1 mark  
 Intersection of MP at highest AP: A/A 1 mark

Total 5 marks

**ECONOMICS****UNIT 1****Key/MarK Scheme**

(b) For indicating that:

Marginal Product is the change in Total Output as a result of employment of an additional unit of Variable factor.

OR

$$MP = \frac{\text{Change in Total Product}}{\text{Change in Quantity of valuable factor}}$$

**(K/C 2 marks)**

For indicating that Average Product is the output per unit of the variable factor

OR

$$\text{Average Product} = \frac{\text{Total Product}}{\text{Quantity of Variable factor}}$$

**K/C (2 Marks)**

For establishing that:

Once MP > AP, AP is rising

**A/A 1 mark**

Once MP < AP, AP is falling

**A/A 1 mark**

MP=AP when AP is at its maximum

**A/A 1 mark**

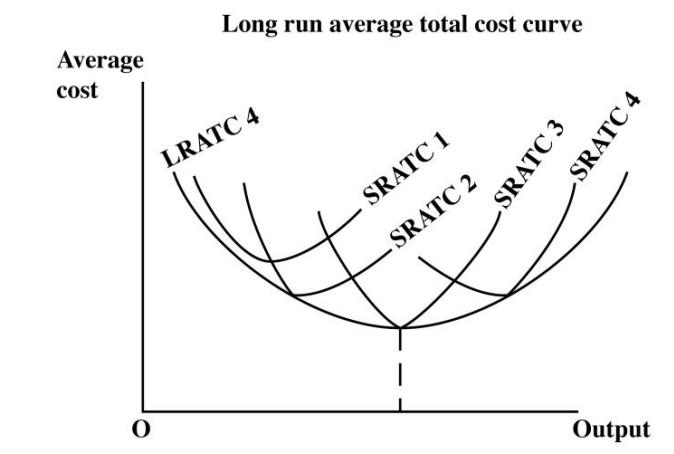
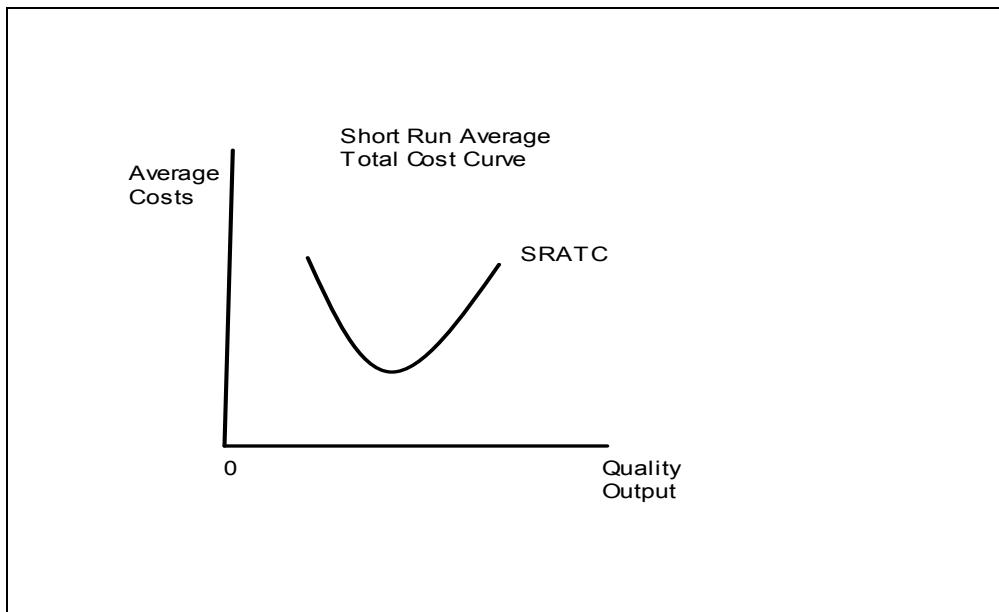
## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 2 cont'd

- (c) Use the SRATC and the LRATC to distinguish between the law of Diminishing Returns and Returns to scale.



## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 2 cont'd

For labeling axes of each graph correctly **K/C 2 marks**

For drawing U-shaped SRATC curve **A/A 1 mark**

For drawing at least 3 SRATC curves **A/A 1 mark**

For drawing the LRATC Curve that envelopes the SRATC curves  
**A/A 1 mark**

For establishing that Law of Diminishing Returns is reflected on SRATC curve while the Returns to scale is reflected on LRATC curve  
**S/E 2 marks**

For indicating that the output levels above minimum SRATC curve are showing diminishing returns  
**S/E 1 mark**

For indicating that output levels below minimum LRATC curve, are showing increasing returns to scale  
**S/E 1 mark**

For indicating that output levels above minimum LRATC curve are showing decreasing returns to scale  
**S/E 1 mark**

**(10 marks)**

**Total 25 marks**

## ECONOMICS

## UNIT 1

## Key/MarK Scheme

**QUESTION 3**

- (a) (i) **Define the term externality.**

Externality refers to spillover effects of an economic activity on third parties.

K/C (2 marks)

- (ii) Example of a positive externality

Immunization for a contagious disease - if one occupant installs a smoke detector in an apartment complex

K/C (1 mark)

- (iii) Example of a negative externality

pollution, traffic congestion.

K/C (1 mark)

- (b) (i) **What is meant by market failure?**

Market failure refers to the output where Social Marginal Benefit (SMB) is not equal to Social Marginal Cost (SMC)

OR

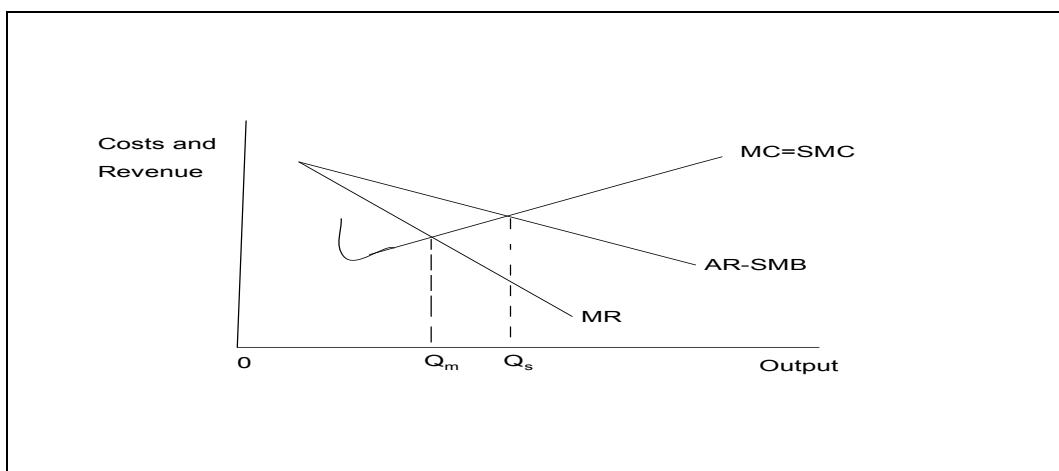
There is underproduction or over production of a good and/or a service.

K/C (2 marks)

- (ii) **How a monopoly and merit goods contribute to market failure.**

For drawing the following diagram

Revenue curves: A/A (1 mark)  
Cost curve: A/A (1 mark)



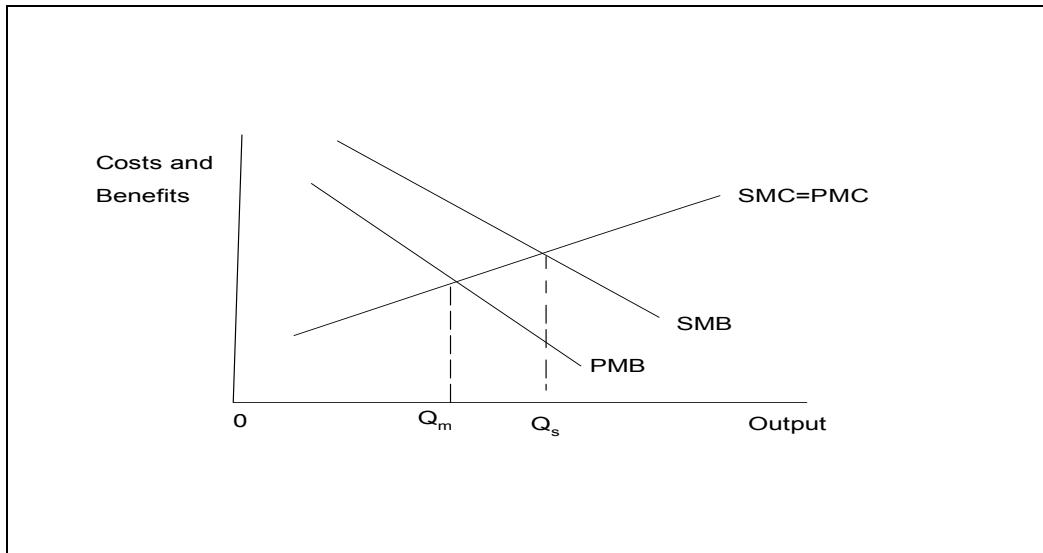
## ECONOMICS

## UNIT 1

## Key/MarK Scheme

QUESTION 3 cont'd

- For indicating that monopoly profit maximizing output is where  $MR=MC$  at  $Q_m$ .  
**A/A (1 mark)**
- For indicating that socially efficient output is where  $SMC=SMB$  at  $Q_s$ .  
**A/A (1 mark)**
- For stating that monopoly output is less than socially efficient level of output.  
**A/A (1 mark)**

**Total 5 marks**

- For Cost curves  
**A/A (1 mark)**
- For benefit curves  
**A/A (1 mark)**
- For indicating that production of merit goods will be where  $PMB=PMC$  at output  $Q_M$   
**A/A (1 mark)**
- For indicating that socially efficient output is where  $SMC=SMB$  at output  $Q_s$   
**A/A (1 mark)**
- For stating that merit good is under-produced by  $OQ_s-OQ_m$ .  
**A/A (1 mark)**

**Total 10 marks**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 3 cont'd**

(c) **Measures that the government can use to correct market failure caused by monopoly**

- Substitution
- Legislation
- Regulation
- Identifying the effect of the measure on monopoly output

**K/C(2 marks)**

Discussion

Subsidy will cause marginal cost to fall and shift downwards

**A/A 2 marks)**

Legislation and regulation such as marginal cost pricing would also cause the marginal cost curve to shift downwards

Fall in marginal cost should result in profit maximizing output coinciding with the socially efficient output but it is difficult to determine the amount of subsidy for eliminating welfare loss

**S/E (5 marks)**

**N.B. Same analysis can be used for merit goods.**

**QUESTION 4**

(a) Distinguish between 'normal profit' and 'abnormal profit'.

- For stating that normal profit is the minimum earnings necessary to keep a firm\entrepreneur in its current economic activity.

OR

Average price = Average Total Cost

**K/C (1 mark)**

OR

Total Revenue = Total cost

- For stating that abnormal profit is the earnings in excess of normal profit

OR

Average Revenue or price is greater than Average Total Cost or Total Revenue is greater than total cost.

**K/C (1 mark)**

- For indicating that abnormal profit is more than normal profit or normal profit is less than abnormal profit.

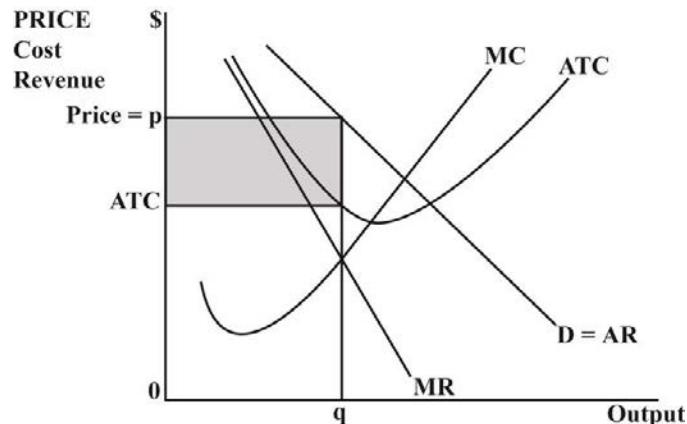
**K/C (2 marks)**

**Total 4 marks**

(b) (i) For stating any two characteristics of a monopolistic competition market structure such as downward sloping average revenue curve, product differentiation, no barriers to entry, price maker, many buyers and sellers.

**K/C (2 marks)**

(ii) For drawing the following diagram



## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 4 cont'd

- For correctly drawing cost curves K/C (1 mark)
- For correctly drawing Revenue curves K/C (1 mark)
- For identifying profit maximization output Q A/A (1 mark)
- For identifying market price P A/A (1 mark)
- For identifying the Average cost for the profit maximising output A/A (1 mark)
- For shading area of abnormal profit A/A (1 mark)

**Total 6 marks**

(iii) For indicating that abnormal profits are competed away in the long run so a firm will either earn only normal profit or incur losses.

**A/A (2 marks)**

For stating that entry of new firms compete away profits

**S/E (1 mark)**

And

Average revenue curve shifts downwards to the left

**S/E (1 mark)**

And

Market share of each firm falls.

**S/E (1 mark)**

(c) For indicating that firms in both monopolistic competition and perfect competition earn only normal profits in the long run.

**A/A (2 marks)**

For indicating that the characteristic of no barriers to entry, allows new firms to enter both types of market structures.

**A/A (2 marks)**

For indicating that the firm in monopolistic competition does not achieve productive efficiency but the firm under perfect competition is productively efficient or achievable optimum level of production

**A/A (2 marks)**

For indicating that firms in monopolistic competition and perfect competition are similar with respect to types of profits earned and entry of firms but not with achieving productive efficiency in the long run.

**S/E (2 marks)**

## ECONOMICS

## UNIT 1

## Key/Mark Scheme

**QUESTION 5**

- (a) For indicating that the least cost rule is

$$\frac{\text{Marginal Physical Product of Labour}}{\text{Price of Labour}} = \frac{\text{Marginal Physical Product of Capital}}{\text{Price of Capital}}$$

**K/C (2 marks)**

- For illustrating the example that applies to the rule -

E.g. Given  $MPP_L \equiv 20$        $P_L \equiv \$5$       and  $MPP_L \equiv 40$        $P_L \equiv \$10$

Then  $\frac{MPP_L}{P_L} \equiv \frac{MPP_L}{P_L}$  would be  $\frac{20}{5} = \frac{40}{10}$

**K/C (4 marks)**

- (b) (i) For stating that Marginal Revenue Product is equal to Marginal Physical Product of the factor multiplied by the Price or Marginal Revenue of the final product.

**A/A (2 marks)**

**K/C (2 marks)**

**Total 6 marks**

- (ii) Complete the table.

Quantity of Labour	Total Product of Labour	Marginal Revenue Product of Labour	Quantity of Capital	Total Product of Capital	Marginal Revenue Product of Revenue
0	0	0	0	0	$0 \times 0 = 0$
1	10	20	1	12	$12 \times 2 = 24$
2	24	28	2	20	$8 \times 2 = 16$
3	38	28	3	27	$7 \times 2 = 14$
4	46	16	4	32	$5 \times 2 = 10$
5	49	06	5	36	$4 \times 2 = 08$

<b>A/A:</b>	1 to 2 correct	(1 mark)
	3 to 4 correct	(2 marks)
	5 to 6 correct	(3 marks)
	7 to 8 correct	(4 marks)
	9 to 10 correct	(5 marks)
	11 to 12 correct	(6 marks)

**Total 6 marks**

- (ii) For correctly stating the rule for profit maximization in the employment of factors of production, i.e. Marginal Revenue Product of Factor = Marginal Resource Cost of Factor.

**K/C (2 marks)**

For using the information calculated in the table to identify quantity of labour as 4 units and quantity of capital as 5 units.

**A/A (2 marks)**

**Key/Mark Scheme****QUESTION 5 cont'd**

By explaining that each quality above equates MRP with MRC.  
**A/A (2 marks)**

**Total 4 marks**

(c) **Discuss one limitation of the Marginal Productivity Theory to maximize profit.**

- In real world producers do not always aim to maximize profit, may have other objectives such as sales maximization, increased market share, etc. as a result the theory is not applicable.

OR

- Producers may have other objectives such as sales maximization, increased market share, etc. as a result the theory is applicable.

**S/E (5 marks)**

**QUESTION 6**

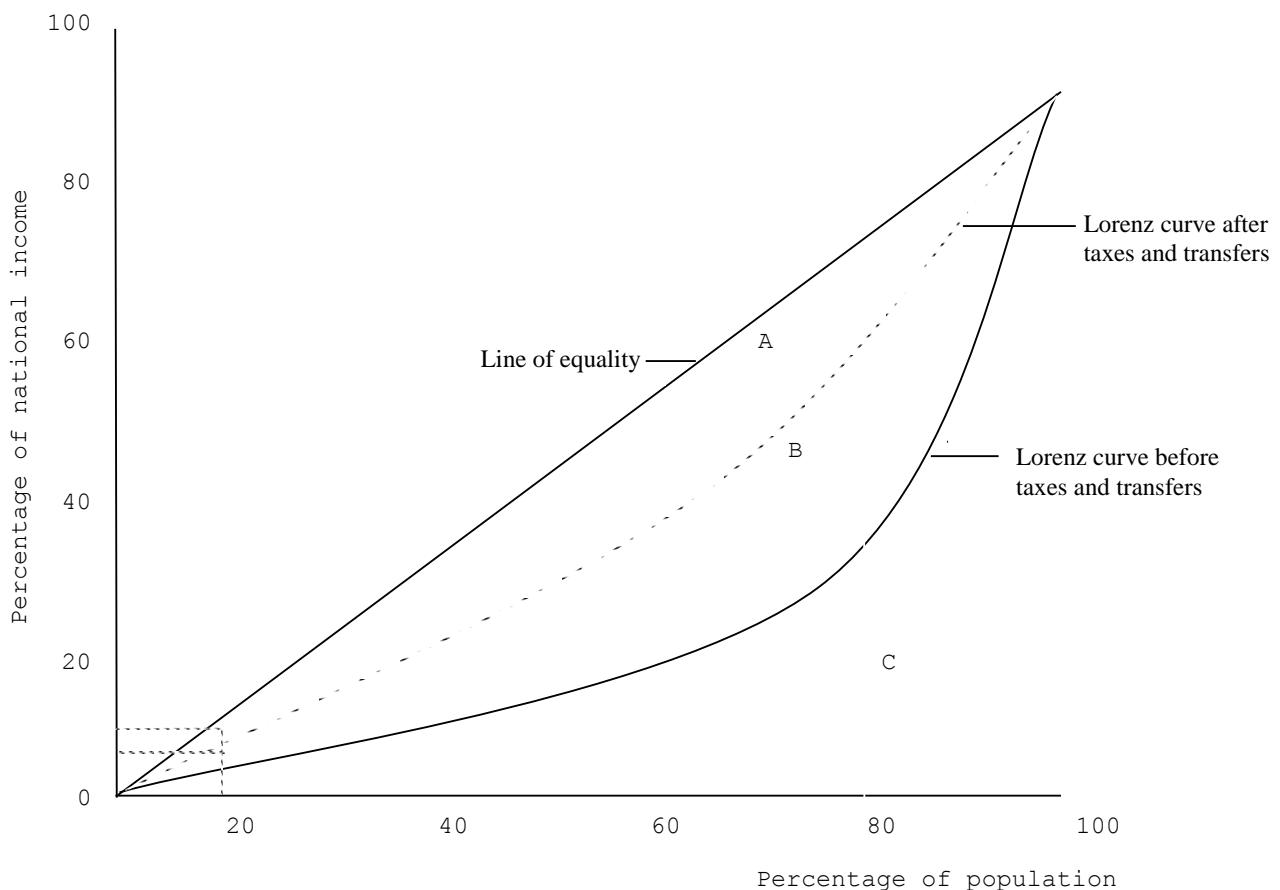
- (a) (i) **Distinguish between size distribution of income and functional distribution of income.**

For stating that size distribution of income is how income earned throughout the economy is distributed among the population of the economy. **K/C (1 mark)**

For stating that functional distribution of income is the proportion of income going to owners of the factors of production. **K/C (1 mark)**

For indicating that size refers to how the country's income is distributed among the population while functional distribution refers to distribution to owners of factors of production. **K/C (2 marks)**

- (ii) **Use a suitable diagram to explain how income inequity is measured.**



## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 6 cont'd

For drawing diagram of Lorenz Curve award 1 mark for correct labels and 1 mark for correctly drawn curves.

**K/C (2marks)**

For showing how inequality, perfect equality and perfect inequality are represented by making reference to the Lorenz curve.

**A/A (3 marks)**

(iii) **Measures that government can use to reduce income inequity.**

Identify any two of the following:

- Taxes
- Subsidies
- Transfers

**A/A (2 marks)**

For clearly outlining how each of two measures redistribute income e.g. Taxes take a larger percentage of income from higher income earners than from lower income owners.

**A/A (2 marks)**

(b) (i) **Identify TWO categories of persons who are more susceptible to poverty.**

- elderly
- physically challenged

**K/C (2 marks)**

(ii) Outline one reason why each category is susceptible to poverty.

For identifying one reason for each of the two categories of persons being susceptible to poverty. Physically challenged persons have limited access to employment.

**A/A (2 marks)**

For comparing each stated category of persons with persons less susceptible to poverty e.g. physically challenged with those who are not physically challenged so the latter have greater access to employment.

**S/E (2 marks)**

**Total 6 marks**

(iii) **Assess the economic benefit of two strategies used by government to alleviate poverty.**

For correctly identifying two strategies used by government to alleviate poverty e.g. transfer payments, free education, minimum wage legislation.

**A/A (3 marks)**

For explaining how each strategy can impact positively on the economy e.g. development of human capital, improved well being.

**S/E (3 marks)**

/CAPE/SPEC/MS/2010

**C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L**

**ADVANCED PROFICIENCY EXAMINATION**

**ECONOMICS**

**SPECIMEN PAPER**

**UNIT 1 - PAPER 02**

**ANSWER KEY  
AND  
MARK SCHEME**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 1**

(a) Differentiate between normal good and inferior good. (4 marks)

Indicating that a normal good has:

OR

- A positive relationship between income and quantity demanded.  
**K/C (1 mark)**

Indicating that interior good has:

OR

- A negative relationship between income and quantity demanded.  
**K/C (1 mark)**

Indicating that the differences are:

- For inferior good relationship between price and quantity demanded can be positive or negative while for normal goods it is only negative.

OR

- Relationship between income and quantity demanded is positive for normal and negative for inferior goods.

**K/C (2 mark)**

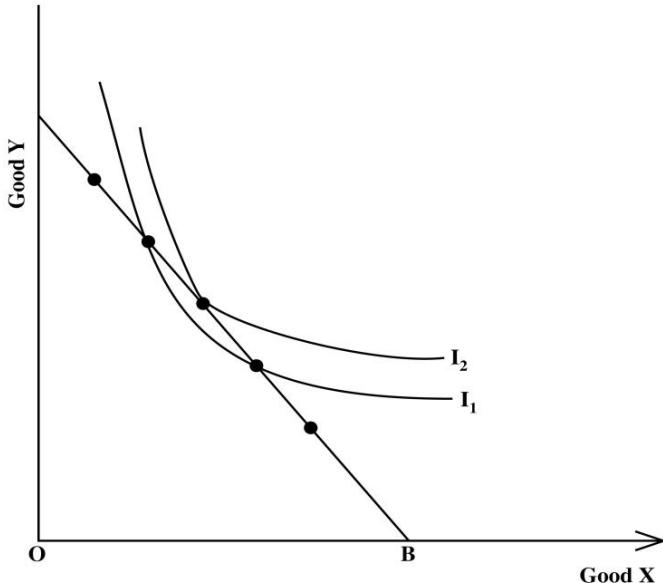
## ECONOMICS

## UNIT 1

## Key/MarK Scheme

(b) Use the indifference curve approach to explain consumer equilibrium.

(12 marks)



Labeling of axes: K/C 2 marks

Drawing MP curve: A/A 2 mark

Drawing budget line: A/A 1 mark

Identifying point of tangency: A/A 1 mark

- Stating that a budget line shows the combination of two goods a consumer can purchase if he spends his income.

K/C (1 mark)

- Stating that an indifference curve shows all possible combinations of two goods that give consumer equal level of satisfaction or utility.

K/C (1 mark)

- Indicating that the budget line shows combination of two goods a consumer can purchase while indifference curve shows combinations that yield the same level of satisfaction or utility.

A/A (2 marks)

- Stating that consumer equilibrium is the point of tangency between the budget line and indifference curve.

A/A (2 marks)

OR

- Indicating that at the point of tangency the consumer achieves maximum utility with given income.

A/A (2 marks)

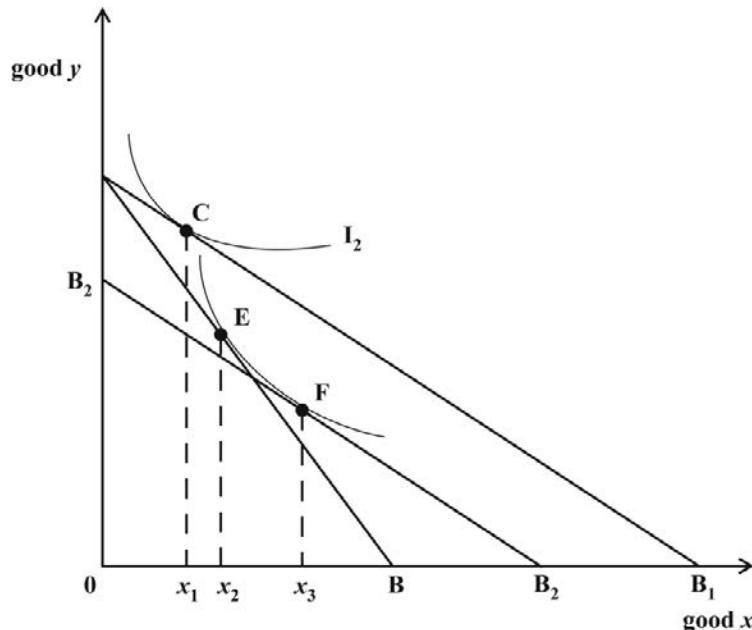
## ECONOMICS

## UNIT 1

## Key/Mark Scheme

- (c) With the aid of a diagram, show, the income and substitution of a fall in price

(9 marks)



- Showing original equal (point E) A/A (1 mark)
- Showing equilibrium because of price change (point C) A/A (1 mark)
- Pivoting of the budget line (B to B<sub>1</sub>) A/A (1 mark)
- Showing parallel downward shift from B<sub>1</sub> to B<sub>2</sub>) A/A (1 mark)
  
- Isolating and explaining the income and substitution effects.  
 X<sub>2</sub> to X<sub>3</sub> is the substitution effect as good is relatively cheaper, therefore increasing the quantity demanded.  
 X<sub>3</sub> to X<sub>1</sub> is the income effect as a fall in price increases real income resulting in a reduction in quantity demanded. E/S (3 marks)

Is the substitution effect as good is relatively cheaper, therefore increasing quantity demanded.

Is the income effect as a fall in price increased real income resulting in a reduction in quantity demanded.

- Categorizing the good as Giffen based on the negative income outweighing the negative substitution effect. S/E (2 marks)

Total 25 marks

## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 2

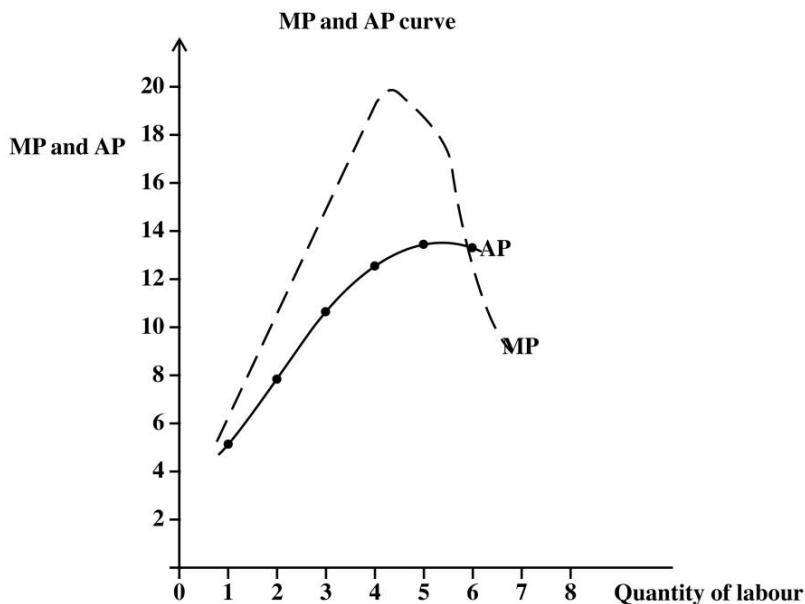
(a) (i) Complete the Table

Units of Labour	T.P	A.P.	M.P.
1	5	5	5
2	15	7.5	(10)
3	(30)	10	15
4	(50)	12.5	(20)
5	68	(13.6)	18
6	78	(13)	10

1-2 correct: A/A 1 mark  
 3-4 correct: A/A 2 marks  
 5-6 correct: A/A 3 marks

Total 3 marks

(ii) Use the completed table to construct a graph showing the Average Product (AP) and Marginal Product (MP) curves.



Labeling of axes: K/C 2 marks  
 Drawing MP curve: A/A 1 mark  
 Drawing AP curve: A/A 1 mark  
 Intersection of MP at highest AP: A/A 1 mark

Total 5 marks

**ECONOMICS****UNIT 1****Key/MarK Scheme**

(b) For indicating that:

Marginal Product is the change in Total Output as a result of employment of an additional unit of Variable factor.

OR

$$MP = \frac{\text{Change in Total Product}}{\text{Change in Quantity of valuable factor}}$$

**(K/C 2 marks)**

For indicating that Average Product is the output per unit of the variable factor

OR

$$\text{Average Product} = \frac{\text{Total Product}}{\text{Quantity of Variable factor}}$$

**K/C (2 Marks)**

For establishing that:

Once MP > AP, AP is rising

**A/A 1 mark**

Once MP < AP, AP is falling

**A/A 1 mark**

MP=AP when AP is at its maximum

**A/A 1 mark**

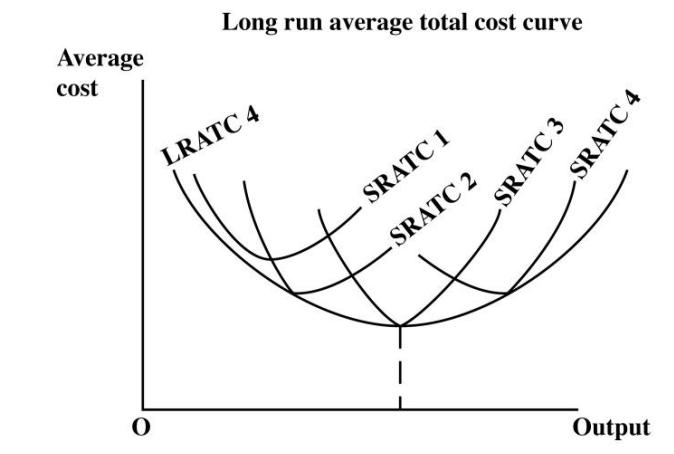
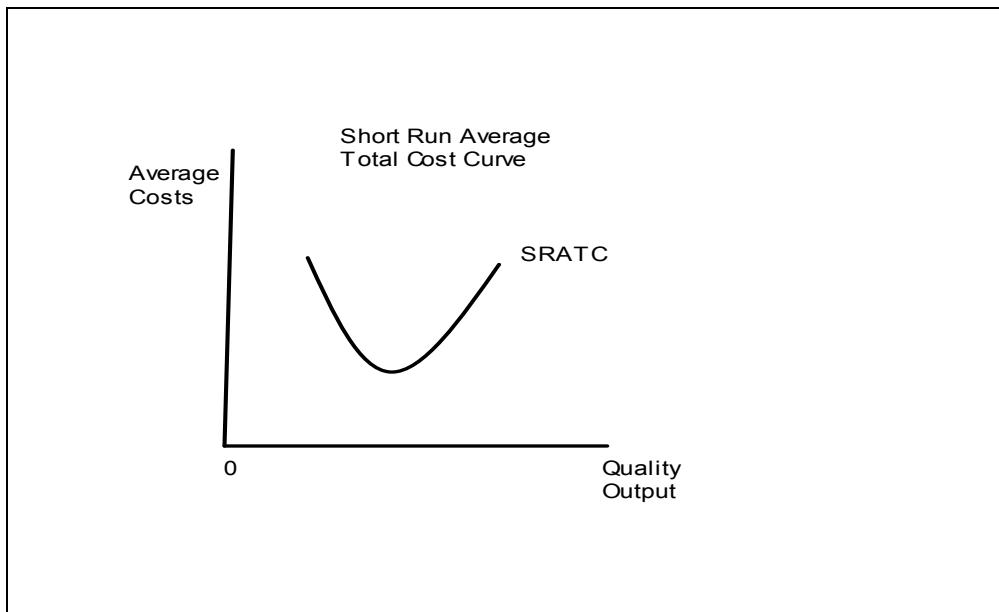
## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 2 cont'd

- (c) Use the SRATC and the LRATC to distinguish between the law of Diminishing Returns and Returns to scale.



## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 2 cont'd

For labeling axes of each graph correctly **K/C 2 marks**

For drawing U-shaped SRATC curve **A/A 1 mark**

For drawing at least 3 SRATC curves **A/A 1 mark**

For drawing the LRATC Curve that envelopes the SRATC curves  
**A/A 1 mark**

For establishing that Law of Diminishing Returns is reflected on SRATC curve while the Returns to scale is reflected on LRATC curve  
**S/E 2 marks**

For indicating that the output levels above minimum SRATC curve are showing diminishing returns  
**S/E 1 mark**

For indicating that output levels below minimum LRATC curve, are showing increasing returns to scale  
**S/E 1 mark**

For indicating that output levels above minimum LRATC curve are showing decreasing returns to scale  
**S/E 1 mark**

**(10 marks)**

**Total 25 marks**

## ECONOMICS

## UNIT 1

## Key/MarK Scheme

**QUESTION 3**

- (a) (i) **Define the term externality.**

Externality refers to spillover effects of an economic activity on third parties.

K/C (2 marks)

- (ii) Example of a positive externality

Immunization for a contagious disease - if one occupant installs a smoke detector in an apartment complex

K/C (1 mark)

- (iii) Example of a negative externality

pollution, traffic congestion.

K/C (1 mark)

- (b) (i) **What is meant by market failure?**

Market failure refers to the output where Social Marginal Benefit (SMB) is not equal to Social Marginal Cost (SMC)

OR

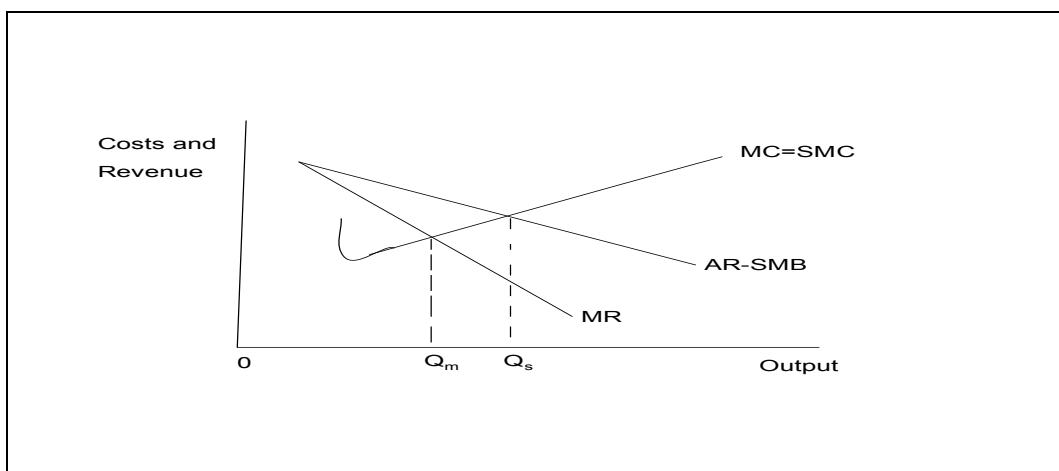
There is underproduction or over production of a good and/or a service.

K/C (2 marks)

- (ii) **How a monopoly and merit goods contribute to market failure.**

For drawing the following diagram

Revenue curves: A/A (1 mark)  
Cost curve: A/A (1 mark)



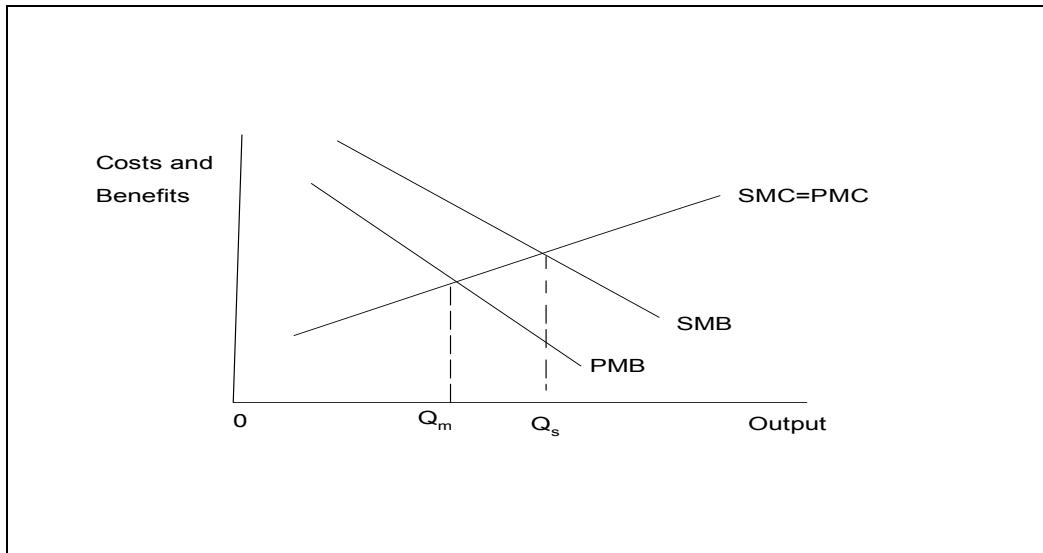
## ECONOMICS

## UNIT 1

## Key/MarK Scheme

QUESTION 3 cont'd

- For indicating that monopoly profit maximizing output is where  $MR=MC$  at  $Q_m$ .  
**A/A (1 mark)**
- For indicating that socially efficient output is where  $SMC=SMB$  at  $Q_s$ .  
**A/A (1 mark)**
- For stating that monopoly output is less than socially efficient level of output.  
**A/A (1 mark)**

**Total 5 marks**

- For Cost curves  
**A/A (1 mark)**
- For benefit curves  
**A/A (1 mark)**
- For indicating that production of merit goods will be where  $PMB=PMC$  at output  $Q_M$   
**A/A (1 mark)**
- For indicating that socially efficient output is where  $SMC=SMB$  at output  $Q_s$   
**A/A (1 mark)**
- For stating that merit good is under-produced by  $OQ_s-OQ_m$ .  
**A/A (1 mark)**

**Total 10 marks**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 3 cont'd**

(c) **Measures that the government can use to correct market failure caused by monopoly**

- Substitution
- Legislation
- Regulation
- Identifying the effect of the measure on monopoly output

**K/C(2 marks)**

Discussion

Subsidy will cause marginal cost to fall and shift downwards

**A/A 2 marks)**

Legislation and regulation such as marginal cost pricing would also cause the marginal cost curve to shift downwards

Fall in marginal cost should result in profit maximizing output coinciding with the socially efficient output but it is difficult to determine the amount of subsidy for eliminating welfare loss

**S/E (5 marks)**

**N.B. Same analysis can be used for merit goods.**

**QUESTION 4**

(a) Distinguish between 'normal profit' and 'abnormal profit'.

- For stating that normal profit is the minimum earnings necessary to keep a firm\entrepreneur in its current economic activity.

OR

Average price = Average Total Cost

**K/C (1 mark)**

OR

Total Revenue = Total cost

- For stating that abnormal profit is the earnings in excess of normal profit

OR

Average Revenue or price is greater than Average Total Cost or Total Revenue is greater than total cost.

**K/C (1 mark)**

- For indicating that abnormal profit is more than normal profit or normal profit is less than abnormal profit.

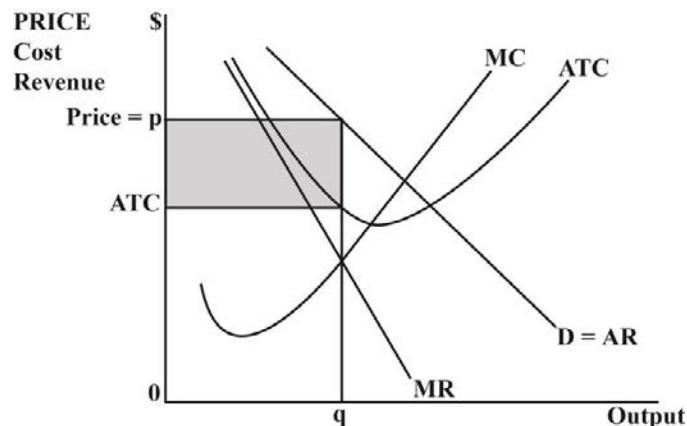
**K/C (2 marks)**

**Total 4 marks**

(b) (i) For stating any two characteristics of a monopolistic competition market structure such as downward sloping average revenue curve, product differentiation, no barriers to entry, price maker, many buyers and sellers.

**K/C (2 marks)**

(ii) For drawing the following diagram



## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 4 cont'd

- For correctly drawing cost curves K/C (1 mark)
- For correctly drawing Revenue curves K/C (1 mark)
- For identifying profit maximization output Q A/A (1 mark)
- For identifying market price P A/A (1 mark)
- For identifying the Average cost for the profit maximising output A/A (1 mark)
- For shading area of abnormal profit A/A (1 mark)

**Total 6 marks**

(iii) For indicating that abnormal profits are competed away in the long run so a firm will either earn only normal profit or incur losses.

**A/A (2 marks)**

For stating that entry of new firms compete away profits

**S/E (1 mark)**

And

Average revenue curve shifts downwards to the left

**S/E (1 mark)**

And

Market share of each firm falls.

**S/E (1 mark)**

(c) For indicating that firms in both monopolistic competition and perfect competition earn only normal profits in the long run.

**A/A (2 marks)**

For indicating that the characteristic of no barriers to entry, allows new firms to enter both types of market structures.

**A/A (2 marks)**

For indicating that the firm in monopolistic competition does not achieve productive efficiency but the firm under perfect competition is productively efficient or achievable optimum level of production

**A/A (2 marks)**

For indicating that firms in monopolistic competition and perfect competition are similar with respect to types of profits earned and entry of firms but not with achieving productive efficiency in the long run.

**S/E (2 marks)**

## ECONOMICS

## UNIT 1

## Key/Mark Scheme

**QUESTION 5**

- (a) For indicating that the least cost rule is

$$\frac{\text{Marginal Physical Product of Labour}}{\text{Price of Labour}} = \frac{\text{Marginal Physical Product of Capital}}{\text{Price of Capital}}$$

**K/C (2 marks)**

- For illustrating the example that applies to the rule -

E.g. Given  $MPP_L \equiv 20$        $P_L \equiv \$5$       and  $MPP_L \equiv 40$        $P_L \equiv \$10$

Then  $\frac{MPP_L}{P_L} \equiv \frac{MPP_L}{P_L}$  would be  $\frac{20}{5} = \frac{40}{10}$

**K/C (4 marks)**

- (b) (i) For stating that Marginal Revenue Product is equal to Marginal Physical Product of the factor multiplied by the Price or Marginal Revenue of the final product.

**A/A (2 marks)**  
**K/C (2 marks)**

**Total 6 marks**

- (ii) Complete the table.

Quantity of Labour	Total Product of Labour	Marginal Revenue Product of Labour	Quantity of Capital	Total Product of Capital	Marginal Revenue Product of Revenue
0	0	0	0	0	$0 \times 0 = 0$
1	10	20	1	12	$12 \times 2 = 24$
2	24	28	2	20	$8 \times 2 = 16$
3	38	28	3	27	$7 \times 2 = 14$
4	46	16	4	32	$5 \times 2 = 10$
5	49	06	5	36	$4 \times 2 = 08$

**A/A:** 1 to 2 correct (1 mark)  
3 to 4 correct (2 marks)  
5 to 6 correct (3 marks)  
7 to 8 correct (4 marks)  
9 to 10 correct (5 marks)  
11 to 12 correct (6 marks)

**Total 6 marks**

- (ii) For correctly stating the rule for profit maximization in the employment of factors of production, i.e. Marginal Revenue Product of Factor = Marginal Resource Cost of Factor.

**K/C (2 marks)**

For using the information calculated in the table to identify quantity of labour as 4 units and quantity of capital as 5 units.

**A/A (2 marks)**

**Key/Mark Scheme****QUESTION 5 cont'd**

By explaining that each quality above equates MRP with MRC.  
**A/A (2 marks)**

**Total 4 marks**

(c) **Discuss one limitation of the Marginal Productivity Theory to maximize profit.**

- In real world producers do not always aim to maximize profit, may have other objectives such as sales maximization, increased market share, etc. as a result the theory is not applicable.

OR

- Producers may have other objectives such as sales maximization, increased market share, etc. as a result the theory is applicable.

**S/E (5 marks)**

**QUESTION 6**

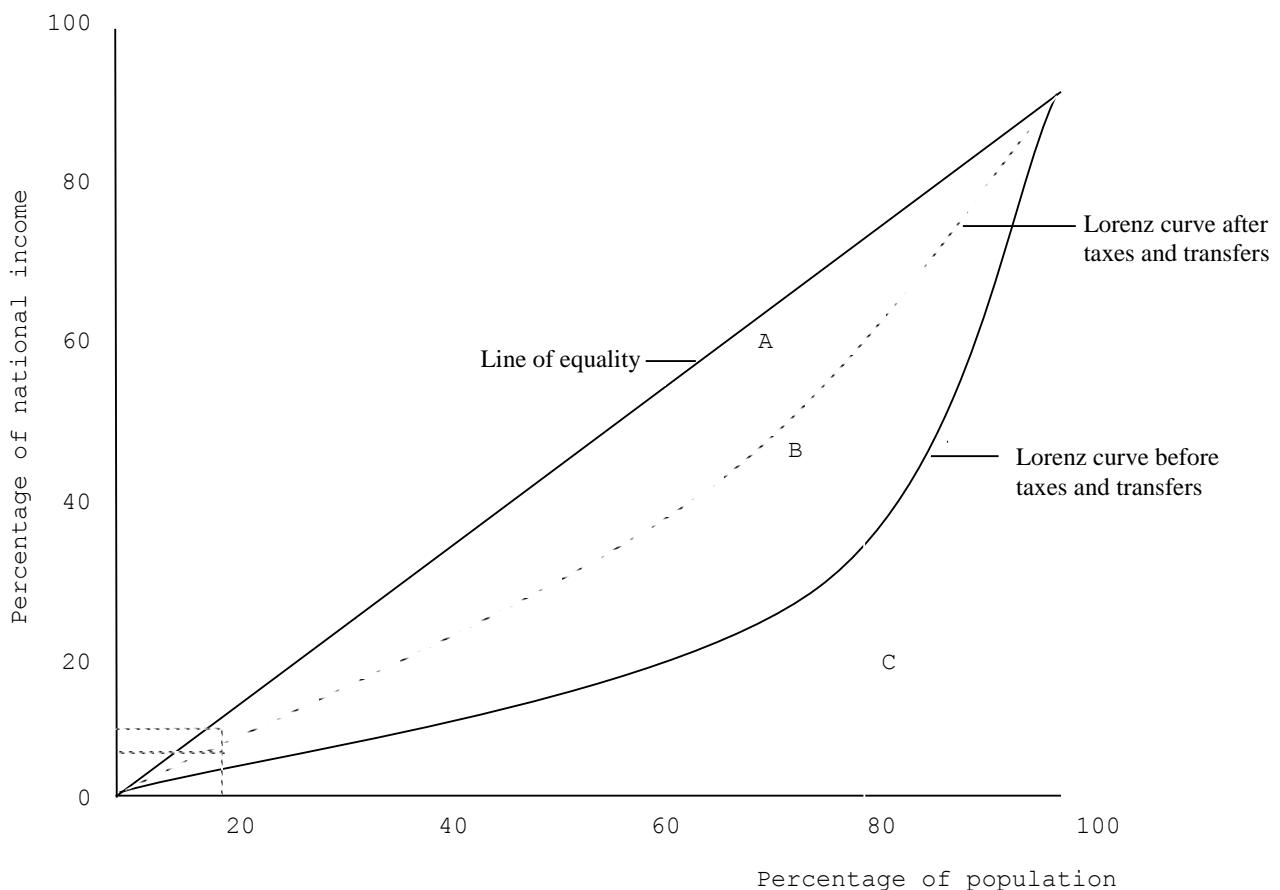
- (a) (i) **Distinguish between size distribution of income and functional distribution of income.**

For stating that size distribution of income is how income earned throughout the economy is distributed among the population of the economy. **K/C (1 mark)**

For stating that functional distribution of income is the proportion of income going to owners of the factors of production. **K/C (1 mark)**

For indicating that size refers to how the country's income is distributed among the population while functional distribution refers to distribution to owners of factors of production. **K/C (2 marks)**

- (ii) **Use a suitable diagram to explain how income inequity is measured.**



## ECONOMICS

## UNIT 1

## Key/Mark Scheme

QUESTION 6 cont'd

For drawing diagram of Lorenz Curve award 1 mark for correct labels and 1 mark for correctly drawn curves.

**K/C (2marks)**

For showing how inequality, perfect equality and perfect inequality are represented by making reference to the Lorenz curve.

**A/A (3 marks)**

(iii) **Measures that government can use to reduce income inequity.**

Identify any two of the following:

- Taxes
- Subsidies
- Transfers

**A/A (2 marks)**

For clearly outlining how each of two measures redistribute income e.g. Taxes take a larger percentage of income from higher income earners than from lower income owners.

**A/A (2 marks)**

(b) (i) **Identify TWO categories of persons who are more susceptible to poverty.**

- elderly
- physically challenged

**K/C (2 marks)**

(ii) Outline one reason why each category is susceptible to poverty.

For identifying one reason for each of the two categories of persons being susceptible to poverty. Physically challenged persons have limited access to employment.

**A/A (2 marks)**

For comparing each stated category of persons with persons less susceptible to poverty e.g. physically challenged with those who are not physically challenged so the latter have greater access to employment.

**S/E (2 marks)**

**Total 6 marks**

(iii) **Assess the economic benefit of two strategies used by government to alleviate poverty.**

For correctly identifying two strategies used by government to alleviate poverty e.g. transfer payments, free education, minimum wage legislation.

**A/A (3 marks)**

For explaining how each strategy can impact positively on the economy e.g. development of human capital, improved well being.

**S/E (3 marks)**

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**C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L**

**ADVANCED PROFICIENCY EXAMINATION**

**ECONOMICS**

**SPECIMEN PAPER**

**UNIT 1 - PAPER 03/2**

**KEYS AND MARK SCHEMES**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 1****(a) How small-scale and large-scale farmers differ.**

Farmers, like other producers, use four major factors of production; land, labour, capital and entrepreneurship. Small farmers encounter greater restrictions in accessing resources than large farmers.

Land

Large farmers do not only have more land, but they have more fertile lands than small farmers. **(2 marks)**

Capital

Large farmers also have more capital and more modern capital than smaller farmers. This also results in large farmers using more advanced and modern technology than small farmers. **(2 marks)**

Labour

Large farmers can afford to hire more skilled labour than small farmers who, if assisted, use unpaid family labour. **(2 marks)**

Entrepreneurship

The entrepreneurial skills of large farmers are usually greater than those of small farmers.

The combined advantage of large farmers makes them more productive than small farmers. **(2 marks)**

**Total 8 marks**

**(b) Factors that influence the demand for ground provisions:**

- The price of ground provision

The higher (lower) the price of ground provisions the lower (higher) the quantity that will be demanded. An inverse relationship exists between the price of ground provisions and the quantity bought. **(2 marks)**

- The price of other goods

There is an inverse (direct) relationship between the price of a complement (substitute) of ground provision and the demand for ground provision. **(2 marks)**

- The income of buyers

There is a direct relationship between consumers' income and the demand for ground provision when it is a normal good; or an inverse relationship when it is an inferior good. **(2 marks)**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 1 cont'd**

- The size of the population  
The size of the population and the demand for ground provision are directly related; when the population rises demand rises and when it falls demand falls. **(2 marks)**

- The taste and preference of buyers  
Tastes and preferences are directly related to demand. If consumers acquire a greater taste for ground provision the demand for it will increase, and vice versa. **(2 marks)**

**Two marks each for any three factors**

**Total 6 marks**

- (c) The diagram shows the likely effects of an effective price floor.

1 mark for correct axes and labeling  
1 mark for showing equilibrium price and quantity  
1 mark for demand and supply  
1 mark for price floor

**Total 4 marks**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 1 cont'd**

Before the price floor is imposed the price of ground provision is  $P_e$  and the quantity sold is  $Q_e$ . After the imposition of a price floor the quantity demanded is less than that supplied. Buyers are now willing to buy a smaller quantity than the former equilibrium quantity [1] while sellers are willing to sell a larger quantity than the former equilibrium quantity. There is therefore a glut on the market. [1]

If the government buys the excess supply, the quantity traded will be  $Q_s'$  otherwise it will be  $Q_D$ .

(6 marks)

**Total 20 marks**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 2**

Perfect competition is one of four major market structures, the others being monopoly, oligopoly and monopolistic competition.

Perfect competition is characterized by the following:

- (i) Many buyers and sellers,
- (ii) The goods are homogeneous,
- (iii) There is perfect knowledge,
- (iv) There is free entry and exit,
- (v) There is no transportation cost.

The good is therefore sold at the same price throughout the market.

**Four marks for any 4 points mentioned**

The market for eggs may approach this ideal. There are usually many buyers and sellers of eggs. [1] There is also free entry and exit since the cost of entering is low. [1] Knowledge is near perfect if not perfect. Eggs are usually similar but not necessarily identical. They vary in shape, size and colour. [1]

Transportation costs are usually similar. The market structure therefore more closely approximates perfect competition [1] than the other market structures. Monopoly is characterized by the presence of one seller who has control over price and prevents entry.

Oligopoly consists of a few firms and like monopoly can bar entry. There is also some control over prices. Prices tend to be sticky due to kinked demand curve: MR curve is broken.

Monopolistic competition approaches perfect competition with many buyers and [1] sellers and no barriers to entry and [1] exit. There are however similar but not-identical products. [2] **This** corresponds somewhat to the market for eggs, [1] since in monopolistic competition the goods are differentiated even if similar. [2] **Buyers** and sellers make a distinction between small and large eggs, brown and white eggs. [2] **There** is therefore some power over price as sorting is practiced. [2] **The** market for eggs may therefore be closer to monopolistic competition. [1]

**Total 20 marks**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 3**

- (a) For indicating that derived demand for agricultural workers arises from the demand for agricultural products that the workers produce.

**K/C (2 marks)**

- For illustrating example of derived demand, e.g. Demand for workers in the sugar industry is based on the demand for sugar.

**A/A (2 marks)**

**Total 4 marks**

- (b) For identifying two factors contributing to low wage rates, e.g.

- Low Demand and High Supply for agricultural workers
- Low Marginal Revenue Product

**K/C (2 marks)**

- For analyzing how factors mentioned result in low wage rate, e.g.:

- For factor 1, the result is lower equilibrium wage rate than if Demand was high and/or Supply low.
- For factor 2, Marginal Revenue Product is low as a result of either low MPP due to limited technology and skills and/or low product price. Hence when MRP is calculated by MPP Product Price or MR, and equated with MRC for profit maximization, a low wage rate results.

**A/A 2 x 2 marks (4 marks)**

**Total 6 marks**

- (c) For identifying the type of poverty as absolute poverty.

**K/C (2 marks)**

- For indicating two costs of poverty which may include:

- Unemployed human resources
- Lower potential output
- Social and environmental costs

**A/A - 2x2 marks  
4 marks**

- For discussing the effects of the costs mentioned on the country:

**QUESTION 3 cont'd**

**ECONOMICS****UNIT 1****Key/Mark Scheme**

- Unemployed human resources result in low levels of income and low living standards and HDI
- Poverty sometimes contributes to squatting in unsuitable areas contributing to poor sanitation and environmental damage and socio-economic problems.

E/S - 2x2 marks  
4 marks

**[Total 10 marks]**

- (a) The demand for farm workers is a derived demand because it is derived from the demand for the products that farm workers produce. [2] The workers are employed in the sugar industry because of the demand for sugar. [2]

**[4 marks]**

- (b) Four areas in which Government can implement policy to improve agricultural production and marketing policies are:

- (i) subsidies to modern inputs such as modern machinery and technology and chemical inputs. Infrastructure, human capital, extension services, credit, land reform ...
- (ii) subsidies would allow small farmers to acquire modern inputs to improve production and productivity. [2]

Infrastructure that gives them access from farm to market will facilitate marketing. [2]

Education and training in agricultural practices would increase their human capital and productivity enabling them to apply modern techniques. [2]

Extension services will give them the advice they need and assist them to introduce new products, improve old ones and support them in other areas. [2]

Access to credit will provide them with the finance they need to acquire the inputs to improve the methods and expand production. [2]

Land reform will provide them with the land they need for expansion.

**Two marks each for discussion of any 4 aspects**

**[8 marks]**

**ECONOMICS****UNIT 1****Key/Mark Scheme****QUESTION 3 cont'd**

- (c) Small farmers face restrictions on their ability to access credit because of adverse selection and moral hazard. These problems occur because of asymmetric information. The lender is not able to accurately assess the credit worthiness of the farmer and may select farmers with high risks. [2] Hence, the farmer is more likely to default on the loan than is anticipated by the lender. [2]

In moral hazard the farmer fails to take the necessary precautions to ensure success and profitability in his venture [2] and so cannot repay the loan. Lenders are therefore reluctant to lend to small farmers because of these problems. [2]

**[8 marks]**

**Total 20 marks**

**CARIBBEAN EXAMINATIONS COUNCIL**

**SECONDARY EDUCATION CERTIFICATE  
EXAMINATION**

**ECONOMICS - UNIT 2**

**SPECIMEN PAPER 2010**

<b>Item No.</b>	<b>Key</b>
1	B
2	C
3	A
4	A
5	D
6	C
7	C
8	D
9	A
10	B
11	D
12	C
13	D
14	D
15	C
16	D
17	D
18	B
19	C
20	D
21	B
22	A
23	A

<b>Item No.</b>	<b>Key</b>
24	B
25	C
26	B
27	A
28	A
29	C
30	C
31	D
32	A
33	C
34	D
35	C
36	C
37	B
38	D
39	C
40	D
41	B
42	A
43	D
44	C
45	C

/CAPE/SPEC/MS/2010

C A R I B B E A N   E X A M I N A T I O N S   C O U N C I L

A D V A N C E D   P R O F I C I E N C Y   E X A M I N A T I O N

E C O N O M I C S

S P E C I M E N   P A P E R

U N I T   2   -   P A P E R   0 2

A N S W E R   K E Y  
A N D  
M A R K   S C H E M E

**ECONOMICS****UNIT 2****Key/MarK Scheme****QUESTION 1**(a) (i) **Distinguish between GDP and GNP**

Indicating that GDP is the total market value of all final goods and services produced annually within the boundaries of a country. **K/C (1 mark)**

Indicating that GNP is the total market value of final output produced by the citizens of a country. **K/C (1 mark)**

Indicating that GNP is GDP plus net factor income from abroad.

OR

GDP is domestically produced output, while GNP is output produced both domestically and internationally but owned by locals. **K/C (2 marks)**

(ii) **Distinguishing between Nominal GDP and Real GDP**

Indicating that nominal GDP is the total output produced measured at current prices. **K/C (1 mark)**

Indicating that real GDP is the total output produced measured at constant price. **K/C (1 mark)**

Indicating that nominal GDP is not adjusted for inflation while Real GDP is adjusted for inflation. **K/C (2 marks)**

(b) **Evaluate the negative effects of a growth in GDP standard of living.** **(12 marks)**

- Sectoral growth can be caused by an increase in the production of military goods (Government spending) which leads to an increase in GDP. However, citizens do not benefit from these goods. **A/A (3 marks)**
- Increases in output can lead to externalities. (Dirty air, polluted water, destruction of forest, gullies and natural water ways). The standard of living on citizens is negatively impacted because of health problems (asthma) and other problems like flooding and reduced water supply. **A/A (3 marks)**
- Growth in GDP can be caused by productivity and longer working hours. Longer working hours lead to reduced leisure time. Persons may have stress related illnesses and divorce rates go up. The standard of living is reduced. **A/A (3 marks)**
- Growth realized does not impact positively on all citizens. Those citizens who are unable to work may not experience an improved standard of living, while their neighbours may. To address this situation, some persons may resort to crime. **A/A (3 marks)**

**ECONOMICS****UNIT 2****Key/MarK Scheme****QUESTION 1 cont'd**

- (c) **Justify whether GDP is an adequate measure of the standard of living of a country.** **S/E (5 marks)**

Response must include the following:

- The fact that GDP as a measure of standard of living is questionable.
- Standard of living is a broad concept and cannot be measured strictly in terms of output increases.

Clearly stated conclusion, good supportive examples. **(4-5 marks)**

Conclusion stated, satisfactory argument, reasonable support. **(2-3 marks)**

Weak conclusion **(0-1 mark)**

**ECONOMICS****UNIT 2****Key/MarK Scheme****QUESTION 2**

- (a) **Define the term 'injections'.**

An injection represents payments received by Firms or households that are not passed on through their spending.

**K/C (2 marks)**

- (b) **Outline THREE reasons why injections would exceed withdrawals.**

**(6 marks)**

Candidates must develop the following points

- There has been an increase in exports. **K/C (2 marks)**
- There has been a rise in business confidence so investment has risen. **K/C (2 marks)**
- There has been a reduction in taxes. **K/C (2 marks)**

- (c) **Four factors that would restore equilibrium** **(12 marks)**

Household would not spend more on domestic goods. **A/A (3 marks)**

They would save more **A/A (3 marks)**

They would pay more taxes **A/A (3 marks)**

They would buy more imports **A/A (3 marks)**

This combination would continue raising withdrawals until they restore National Income Level.

- (d) **Explain what happens when equilibrium is restored** **S/E (5 marks)**

Indicate that withdrawals would have to increase (increase in saving, taxes and imports). More income would be circulating in the economy and aggregate expenditure would increase. **S/E (2 marks)**

Identifying the increase in aggregate expenditure on the diagram. **S/E (1 mark)**

Showing inverse relationship between rate of inflation and the rate of unemployment.

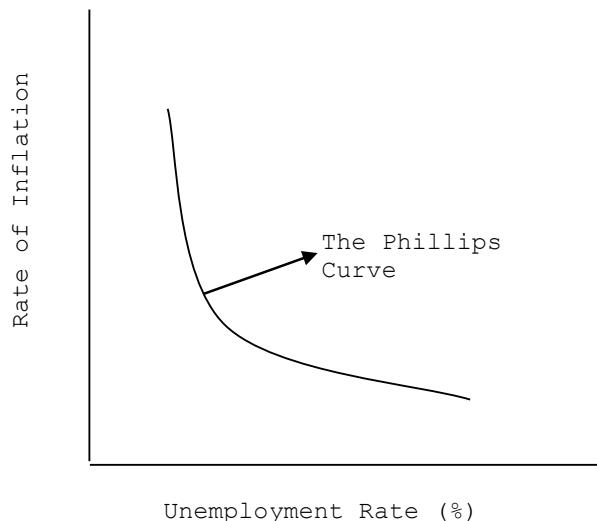
OR

Indicating how lower unemployment rates are associated with higher rates of inflation. **S/E (2 marks)**

**Total 25 marks**

**ECONOMICS****UNIT 2****Key/MarK Scheme****QUESTION 3**

- (a) The Phillips Curve



<b>Labeling axes</b>	<b>K/C (2 marks)</b>
<b>Drawing curve</b>	<b>K/C (1 mark)</b>
<b>Labeling curves</b>	<b>K/C (1 mark)</b>

The Phillips Curve shows the relationship between the unemployment rate and the rate of inflation, indicating a trade-off between the two. **K/C (2 marks)**

Any point on the curve relates to particular level of unemployment to a particular change of money wages. **K/C (2 marks)**

- (b) (i) Rising unemployment: This is of concern to the government because with rising unemployment
- potential output is not achieved, the demand will not be met **A/A (2 marks)**
  - greater burden on the state and on tax payers since those unemployed persons will be given welfare at the expense of the government. **A/A (2 marks)**
  - non-economic costs, such as increased crime as some seek to address their situation by stealing **A/A (2 marks)**

**ECONOMICS****UNIT 2****Key/MarK Scheme****QUESTION 3 cont'd**

(ii) High and rising inflation is of concern to the government because

- domestically this would lead to citizens increasing their demand for imports and foreign consumers of locally produced goods reducing demand for local exports which leads to balance of payment deficit

**A/A (2 marks)**

- the increased price of commodities would result in decreased demand with citizens' standard of living being affected.

**A/A (2 marks)**

- rising price levels might increase production cost which might cause firms to retrench workers resulting in unemployment and cut back aggregate supply.

**A/A (2 marks)**

(c) **Justify whether Phillips curve is applicable to your country**

**S/E (5 marks)**

Discussion must include the fact that Phillips curve can assist government in selecting the preferred combination of unemployment and inflation.

It can also assist in making decisions regarding the reduction of unemployment if the country is prepared to pay the price for higher inflation

Discussion well developed and include appropriate illustration/examples.

**S/E (4-5 marks)**

Discussion fairly well developed and include illustrations / examples

**(2-3 marks)**

Weak conclusion

**(0-1 mark)**

**ECONOMICS****UNIT 2****Key/Mark Scheme****QUESTION 4****(a) (i) Distinguish between fiscal policy and monetary policy**

Indicating that monetary policy is the use of banking system to control the money supply and influence interest rates to influence economic activity. **K/C (1 mark)**

Indicating that fiscal policy is the use of government spending and taxation to influence economic activity. **K/C (1 mark)**

Indicating that monetary policy is controlling the money supply by manipulating rate while fiscal policy is the ability to influence spending by taxation. **K/C (2 mark)**

**(ii) Distinguish between expansionary and contractionary monetary policy**

Indicating that expansionary monetary policy increases the money supply by lowering interest rate, it increases real GDP and employment. **K/C (1 mark)**

Indicating that contractionary monetary policy decreases the money supply by increasing interest rates, it reduces real GDP and employment. **K/C (1 mark)**

Indicating expansionary monetary policy is used during periods of recession and unemployment while contractionary monetary policy is used during periods of inflation. **K/C (2 marks)**

**(b) Explain how the rate of inflation can be controlled**

Stating that open market operations via the sale of government securities will reduce excess reserves and lead to a multiple contraction of the money supply.

Interest rates increase, investment spending decrease, aggregate demand decrease as well as inflation. **A/A (3 marks)**

Stating that increases in the reserve ratio leads to reduction in excess reserves, decrease leads to reduction in excess reserves, decreases the money supply. This will reduce the banks' ability to lend, and this reduces aggregate demand as well as inflation. **A/A (3 marks)**

Indicating that increasing the discount rates discourages banks from borrowing from the Central Bank and reduces the ability to lend. The money supply is reduced, aggregate demand is reduced and inflation is reduced. **A/A (3 marks)**

Stating that by using moral suasion, the Central Bank administration asks banks to restrict their lending. If banks agree, the money supply is reduced, investment spending is reduced, aggregate demand is reduced and inflation is reduced. **A/A (3 marks)**

**ECONOMICS****UNIT 2****Key/Mark Scheme****QUESTION 4 cont'd**

(c) **Discuss the effectiveness of using monetary policy to control inflation** **S/E (5 marks)**

Discussion should be developed on ONE of the following:

- Moral suasion is not compelling
- The money supply of foreign-owned commercial banks is difficult to control
- Difficulty in eliminating lags in monetary policy
- Monetary policy is weakened by fiscal indiscipline
- Excess liquidity makes monetary policy ineffective

Discussion is coherent and generally well supported by a coherent example **S/E (4-5 marks)**

Discussion is satisfactory and partially supported by an example **S/E (2-3 marks)**

Discussion is weak and without a supportive example **S/E (0-1 mark)**

**ECONOMICS****UNIT 2****Key/Mark Scheme****QUESTION 5**

- (a) **Outline TWO main components of sustainable development.** (4 marks)

Sustainable development refers to economic development that takes into consideration the well-being of the present as well as future generations, thus ensuring that adequate resources are made available including a safe environment and natural wealth. **K/C (2 marks)**

- (b) **Identify FOUR structural characteristics of the Caribbean**  
**K/C (4 marks)**

Smallness  
Openness  
Composition of exports  
Resource base  
Poverty  
Economic dependence

- (c) **Evaluate the impact of the region's structural characteristics on sustainable economic development** (17 marks)

**Candidates should develop the points identified in (b) above**

Smallness  
Being small means that government is in a weak negotiating position. This is usually the case with small states, and its firms need foreign sources of supply and foreign exchange, more than they themselves are needed. **A/A (3 marks)**

Openness  
The open nature of most small states has resulted in the presence of multinationals relocating to them. This sometimes results in these states experiencing an injection of foreign direct investment. **A/A (3 marks)**

Narrow export base  
Most of the exports of small states are usually primarily agricultural products. This makes the export base narrow. That is, the export is made up of a small range of goods and services. **A/A (3 marks)**

Narrow resource base  
Low levels of labour productivity may be experienced because of lack of capital due to inefficient savings to finance investment and as a result production is highly labour intensive. There is inefficient technology and poor quality labour due to low skill and educational levels. **A/A (3 marks)**

Conclusion  
Candidates should discuss the pros and cons of the aforementioned factors.

Clear and coherent, well reasoned conclusion	(4-5 marks)
Reasonable but inconclusive discussion	(2-3 marks)
Weak discussion	(0-1 marks)

**ECONOMICS****UNIT 2****Key/Mark Scheme****QUESTION 6**

- (a) **Four forms of economic integration** **(8 marks)**

Economic integration refers to economic cooperation among economies and harmonization of their economic policies.

Free trade area - a trading arrangement where member countries remove tariffs and quotas between themselves but retain restriction with non-member countries. **K/C (2 marks)**

Customs Union - a free trade area within member countries adopting common external tariffs and quotas with non-member countries.

**K/C (2 marks)**

Common Market - a customs union with free movement of the factors of production between countries. **K/C (2 marks)**

Economic Union - a common market with convergence of macro-economies among members as well as a single currency. **K/C (2 marks)**

- (b) **Evaluate the costs and benefits of economic integration**

Candidates should discuss the four forms of integration attained by the Caribbean in a coherent manner.

The process of integration in the Caribbean has gone from a free trade area, CARIFTA, to a Customs Union, CARICOM. There is currently a Common External Tariff (CET) on export from non-members. The final stage of integration will be seen with the CARICOM Single Market and Economy. There will be free movement of labour and resources throughout the CSME. **A/A (6 marks)**

Candidates should discuss the costs and benefits of economic integration in the Caribbean. That is, Trade creation - countries switch trade from high cost to low cost producers. There will be greater specialization because of comparative advantage. Lower cost leads to greater surplus.

Trade diversion - Most countries trade with non-members (US, UK, Europe) whose cost of production would be cheaper than those countries inside the Caribbean region. Trade diversion may be limited since trade among CARICOM members states is limited in volume and value.

**A/A (6 marks)**

Candidates should conclude that economic integration movement in the Caribbean has challenges but there was movement from the lower form (Free Trade Area) to a high form (Economic Union). Here, the benefits exceed the costs. **S/E (5 marks)**

Clear and coherent, well reasoned conclusion

**(4-5 marks)**

Reasonable but inconclusive discussion

**(2-3 marks)**

Weak discussion

**(0-1 marks)**

CAPE/K/MS/2010

C A R I B B E A N      E X A M I N A T I O N S      C O U N C I L

HEADQUARTERS

ECONOMICS

UNIT 2 - PAPER 03/2

KEYS AND MARK SCHEME

## ECONOMICS

## UNIT 2 - PAPER 03/2

## KEYS AND MARK SCHEME

**QUESTION 1**

(a) State THREE reasons why Foreign Direct Investment companies invest abroad. Any three of the following

- To gain access to raw materials and market K/C (2 marks)
- To avoid trade barriers K/C (2 marks)
- To take advantage of lower labour costs K/C (2 marks)
- to exploit their technological and organizational advantages(such as superior managerial skills) over local firms K/C (2 marks)
- because their main domestic rivals have already undertaken overseas investment or about to do so K/C (2 marks)

**Total 6 marks**

(b) Explain THREE ways in which the presence of Foreign Direct Investment impacts on the aggregate expenditure and equilibrium of a country.

Foreign direct investment is considered as gross private domestic investment. An increase in foreign direct investment will lead to an increase in aggregate expenditure A/A (2 marks)

since  $AE = C + Ig + G + Xn$  of the same amount. A/A (2 marks)

The equilibrium level or national income/GDP will increase by an amount that is greater than the initial increase in foreign direct invest because of the multiplier effect. A/A (2 marks)

**Total 6 marks**

(c) Discuss, using Classical theory, unemployment in the Caribbean.

Classical theory view all unemployment as being voluntary. They assumes that prices and wages are flexible and that they adjust quickly so the market will always be in equilibrium. Anyone who is without employment chooses to be unemployed. If unemployment exist for a brief moment, the forces of supply and demand will adjust quickly to bring the labour market back into equilibrium, therefore anyone who wants to work will find work.

## ECONOMICS

## UNIT 2 - PAPER 03/2

## KEYS AND MARK SCHEME

**QUESTION 1 cont'd**

In the Caribbean there are persons who have graduated from schools and colleges and are unemployed because they refuse to take a job at a lower level than what they think they qualify for. For instance, an individual who graduates with 6 CXC subjects may refuse to take a job as a store clerk, hence, according to the theory of unemployment, that person may choose to be unemployed.

Outlining theory	A/A (2 marks)
Applying theory to the Caribbean	S/E (4 marks)
Use of appropriate examples	S/E (2 marks)

**Total 20 marks**

## ECONOMICS

## UNIT 2 - PAPER 03/2

## KEYS AND MARK SCHEME

**QUESTION 2**(a) (i) **Definition of National Debt**

National Debt refers to the total of all past borrowings by the state.

**K/C (2 marks)**

(ii) **Outline TWO ways by which FDI flows by MNCs may have a positive impact on a country's National Debt.**

- The government can utilize its ability to give tax breaks and incentives to firms that may wish to invest locally hence foreign exchange is provided
- More employment is provided and this generates more tax revenue

**K/C (2 marks)**

**K/C (2 marks)**

**Total 6 marks**

(b) **Explain THREE ways in which fiscal policy in your country may discourage the presence of multinational companies (MNCs) and foreign direct investment (FDI).**

- If taxes to the firms are too high.
- If insufficient expenditure is spent on the country's infrastructure such as roads, water and electricity.
- If there is no incentive to MNC in the form of tax holidays.

**A/A (2 marks)**

**A/A (2 marks)**

**A/A (2 marks)**

**Total 6 marks**

(c) **Evaluate the impact of MNCs on employment in your country.**

Candidates' discussion should include at least TWO of the following points

- the training of employees
- the hiring of citizens
- the technological experience gained by workers

## ECONOMICS

## UNIT 2 - PAPER 03/2

## KEYS AND MARK SCHEME

**QUESTION 2 cont'd**

While MNCs provide employment for citizens, more often than not employment is at the lower level. [2] Most of the executive positions are held by foreign individuals. [1] There is usually little opportunity for training as the skills required is usually at the lower level. [2] This is quite evident in the construction industry [1] where locals are usually masons, carpenters and labourers while positions such as architect and engineer are held by foreign persons. [2]

<b>Outline benefits and drawbacks</b>	<b>A/A (2 marks)</b>
<b>Discussion focuses on benefits and drawbacks and uses illustrative examples</b>	<b>S/E (5-6 marks)</b>
<b>Discussion focuses on benefits and drawbacks</b>	<b>S/E (3-4 marks)</b>
<b>Discussion focus on one side of the argument</b>	<b>S/E (1-2 marks)</b>
	<b>(8 marks)</b>

**Total 20 marks**

## ECONOMICS

## UNIT 2 - PAPER 03/2

## KEYS AND MARK SCHEME

**QUESTION 3**(a) (i) **Define 'Current Account'**

Current Account are records of exports and imports of goods and services, net investments and net transfers.

**K/C (2 marks)****Examples of Current Account Transaction****K/C (1 mark)**

Merchandise Trade Balance  
Services Balance  
Net Property Income Balance  
Current Transfers Balance

**Define 'Capital Account'**

Capital Account are records of the transfers of capital to and from abroad. They are addition to the capital stock of a country.

**K/C (2 marks)****Examples of Capital Account Transactions****K/C (1 mark)**

Official Capital flows  
Private Capital flows  
Errors and Omissions

**Total 6 marks**(b) **Explain THREE ways in which FDI flows by MNCs impact negatively on the Caribbean.****Candidates must elaborate on Any three for 2 marks each**

- Profit may be repatriated - Multinationals can deprive Caribbean countries of foreign exchange. They have the ability to move capital and profits around the world and avoid tax and exchange control regulations through policy or inter-company pricing. Also, while goods produced by these companies are sold abroad thus creating exports for Caribbean countries, much of the equipment, parts etc, which goes into the finished goods have to be imported.

## ECONOMICS

## UNIT 2 - PAPER 03/2

## KEYS AND MARK SCHEME

- Cultural penetration may influence the citizens - Multinationals may change the culture of Caribbean countries in such a way that people's priorities change and they become more selfish, greedy and rapacious and less concerned with their fellow human beings in pursuit of wealth.
- There may be transfer pricing
- Tax holidays may result in country's losing out on valuable revenue

(c) **Justify why FDI inflows are classified as Capital Account Transactions in the Balance Sheet.**

FDI inflows are classified as Capital Account transactions since they represent additions to the stock of capital. It is recorded under Private Capital flows. The income earned on such investment by a MNC is however classified as a Capital Account Transaction.

For example, if funds from Barbados are exported to purchase United States bonds, the capital transaction involves the purchase and hence the import of the United States bonds and this has the same effect on the balance of payment as the purchase and hence the import of a United States Good. Both items involve payment to foreigners and both use foreign exchange. They are thus debit items in the Barbados balance of payment.

**Show a clear understanding of the transaction** **A/A (2 marks)**

**Discuss concept with the use of valid illustrative examples** **S/E (6 marks)**

**(8 marks)**

**Total 20 marks**

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION**

**MAY/JUNE 2004**

**ECONOMICS**

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## ECONOMICS

### CARIBBEAN ADVANCED PROFICIENCY EXAMINATION

MAY/JUNE 2004

#### GENERAL COMMENTS

The overall performance of candidates was satisfactory. Some areas of the syllabus were quite challenging for the candidates, but even in those, many of the candidates' performances were quite excellent.

#### UNIT 01

#### PAPER 01

Overall performance in Unit 1 was satisfactory. Excellent responses were given to even the most challenging areas of the syllabus. Paper 01, microeconomics was challenging. It consisted of 15 questions, each worth 6 marks. There were three modules, each consisting of five questions.

#### PAPER 01- Short Answers

##### Module 1

This module addressed some of the fundamental concepts of Economics such as scarcity, choice, opportunity cost, efficiency.

##### Question 1

This question required knowledge and understanding of the production possibilities frontier and the ability to conduct analysis using it. Most candidates, while exhibiting a satisfactory understanding of the production possibilities frontier, could not use it to calculate opportunity cost.

##### Question 2

This question required candidates to draw a diagram representing the market for a commodity and to use it to show their understanding of the effects of various factors on the demand, supply, quantity traded and price. Performance on this question was satisfactory.

### Question 3

This question required understanding of consumer choice and the ability to analyse consumer choice using the utility theory. Many candidates performed well on this question, but others found it very challenging.

### Question 4

This question required knowledge and understanding of total, average and marginal product. Many candidates performed well on this question, but some found that the arithmetic required in the response, very challenging.

### Question 5

This question required knowledge and understanding of four fundamental concepts. Many candidates excelled in this question, but too many, while showing some acquaintance with these terms, could not give precise explanations of them.

## **Module 2**

This module dealt with the efficiency with which the market system allocates scarce resources, including market failure. Performance in this module was satisfactory.

### Question 6

This question required candidates to show knowledge and understanding of the main types of market structure and to compute two measures of concentration. Performance on this question was excellent.

### Question 7

This question required knowledge of resource misallocation caused by externalities, and policy measures aimed at correcting the results of externalities. Candidates' performance was satisfactory, but too many could not give precise explanations of external benefits and external costs.

### Question 8

This question required knowledge of how oligopolies operate in general and, in particular, the assumption made about price in the kinked demand model and in the leadership model. Performance in this question was satisfactory, but too many candidates showed little acquaintance with the models.

### Question 9

This question required knowledge and understanding of the natural monopoly and the ability to analyse its behaviour when regulated and unregulated. Some candidates performed well, but many showed a lack of competence.

### Question 10

This question required knowledge of the pricing strategies used in business. Of particular interest was discrimination, and the short-run and long-run profitability of competitive firms. This question was popular and many candidates performed well. Many candidates, however, could not distinguish between short- and long-run and between normal and above-normal profit.

## **Module 3**

This module dealt with a number of popular issues such as the functional distribution of income, inequality and poverty. Performance in the module was satisfactory.

### Question 11

This question required knowledge of the factors of production, the rewards and how these relate to the cost of production. Performance on the question was satisfactory, but some candidates could not relate factor rewards to the cost of production.

### Question 12

This question required knowledge of the relationship between input and output, and understanding of the efficient use of resources. Many candidates could not calculate the marginal product and use the input/output information with the prices. They were required to analyse the behaviour of employers with regard to the number of workers employed and the quantity of the product produced.

### Question 13

This question required knowledge of the composition of the labour force and labour supply; including the calculation of participation rates. Some candidates performed well on the question, but many found it challenging.

### Question 14

This question required an understanding of the mobility of workers in the Caribbean Community, CARICOM. Performance on this question was satisfactory, though some candidates did not show a deep understanding of the term ‘labour mobility’.

### Question 15

This question required a knowledge of the types and causes of poverty. While candidates demonstrated an understanding of the causes of poverty, many were not clear about the ‘poverty line’.

## **GENERAL COMMENTS**

### **PAPER 02- Essays**

Paper 02 required higher-level competencies. It gave candidates the opportunity to combine their knowledge and understanding of basic economic terms, concepts and tools with their ability to analyse economic issues and evaluate economic policies and programmes.

Candidates were required to answer one of two questions in each of the three modules. Each question was worth 50 marks.

### **Module 1**

Module 1 dealt with decision making by consumers or households combined with the inputs of firms, produce outputs and the cost of production.

### Question 1

This question required candidates to:

- (a) demonstrate their understanding of indifference curves and budget lines;
- (b) explain how the consumer chooses from among different combinations of two products given their prices and his or her income; and
- (c) explain the income and substitution effects of a price change.

Performance on this question was good. However, some candidates found the analysis of the impact of a price change very challenging.

### Question 2

This question required candidates to demonstrate an understanding of:

- (a) the cost concepts outlined in the syllabus;
- (b) the relationship between the marginal and average cost curve;
- (c) the shape of various cost curves;
- (d) the supply curve and the calculation and meaning of the elasticity of supply.

Performance on this question was good. Some candidates found explaining the relationship between the average cost curve and the marginal cost curve very challenging.

## **Module 2**

This Module examined candidates' ability in the following areas:

- (a) the ability to analyse short-run and long-run profitability of competitive firms;
- (b) economic efficiency and market failure;
- (c) behaviour and performance of unregulated and regulated natural monopolies.

The responses indicated that candidates found Question 4 more challenging than Question 3.

### Question 3

This question required candidates to demonstrate an understanding of key economic concepts and the ability to analyse the impact of changes in key variables on short and long-run decisions of competitive firms. The performance in this question was good, but some candidates were not familiar with the terms 'normal profit' and 'zero economic profit'.

### Question 4

This question was one of the most challenging questions. It required:

- (a) knowledge and understanding of the economic terms outlined in the syllabus;
- (b) the ability to analyse output and pricing decisions in a natural monopoly when unregulated and when regulated;
- (c) the impact of different forms of regulation on a firm's decisions.

Candidates were also required to analyse

- (i) the issue of external costs and their effects on efficient resource allocation
- (ii) policy measures implemented to address the inefficient resource allocation caused by external costs.

Some candidates performed well on the question, but many found it very challenging.

### **Module 3**

In Module 3 candidates were required to analyse and evaluate issues surrounding the ‘resources’ market, and in particular, the labour market, the influence of trade unions on employment and wages in the labour market. It also required knowledge and understanding of concepts and issues associated with income distribution and the measurement of inequality and factors that contribute to poverty.

#### Question 5

In this question, candidates were required to analyse and evaluate the influence of trade unions on the labour market. Candidates’ performance on this question was good. Candidates responded to the challenges posed in this question very well.

#### Question 6

This question required:

- (a) knowledge and understanding of poverty;
- (b) discussion about the causes of poverty;
- (c) an understanding of the Lorenz Curve and the Gini coefficient as measures of inequality;
- (d) an evaluation of the effect of information asymmetry on efficient resource allocation.

Candidates’ performance on this question was very satisfactory.

## **GENERAL COMMENTS**

### **UNIT 2**

Unit 2 dealt with macroeconomic concepts and issues. The candidates demonstrated a good grasp of the subject matter. Their responses to most of the questions were of a satisfactory quality.

#### **PAPER 01 - Short Answers**

This paper comprised 15 questions, divided into five questions per module. Each question was worth 6 marks. Performance on the paper was satisfactory.

##### **Module 1**

This module required candidates to demonstrate an understanding of

- (a) national income accounting;
- (b) the components of aggregate demand (expenditure) ;
- (c) the classical and Keynesian economic models; and
- (d) national income equilibrium, recessionary and inflationary gaps.

##### Question 1

This question required candidates to distinguish between microeconomic and macroeconomic variables and issues. Candidates' performance on this question was good.

##### Question 2

This question required knowledge and understanding of Gross Domestic Product and its measurement. Candidates were required to demonstrate a good understanding of terms such as intermediate goods, final goods and double counting. Performance in the question was good.

##### Question 3

This question required knowledge and understanding of:

- (a) the disposal of income between consumption and saving;
- (b) investment and the consumption function; and
- (c) the MPC and the derivation of the multiplier from it.

Candidates' performance on parts (a) and (c) was fair, but part (b) was very challenging.

#### Question 4

In this question candidates' ability to distinguish between the classical and Keynesian aggregate supply curves and the effect on equilibrium, output and the price level of a shift in the aggregate demand curve was assessed. Some candidates performed well on the question, but many could not identify the effects of changes in investment expenditure on other variables.

#### Question 5

This question required an understanding of the recessionary gap, the ability to identify equilibrium quantity and a discussion about the effects of an increase in investment on aggregate expenditure. Candidates performed satisfactorily on this question, but some found calculating the size of the gap quite challenging.

## **Module 2**

Module 2 covered the nature of money its measurement, money demand and supply, the role of the central bank, monetary and fiscal policy, servicing the national debt and the quantity theory.

#### Question 6

In this question candidates were required to demonstrate an understanding of the functions of money, the components of  $M_1$  and  $M_2$  and the precautionary motive, for holding money. Performance on this question was good. Some candidates were severely challenged by the constituents of  $M_1$  and  $M_2$  but the other topics were well treated.

#### Question 7

This question required a knowledge of the major instruments used by central banks in the implementation of monetary policy and an understanding of how an increase in the interest rate affects the demand for money. This question was well done by the majority of candidates.

### Question 8

This question required knowledge and understanding of fiscal policy, a budget deficit, and a balanced budget. Some responses lacked the required precision, nevertheless, performance on this question was fair.

### Question 9

In this question candidates calculated the debt service ratio and the effect of an increase in the ratio on export earnings. Candidates' responses indicated that this was one of the most challenging questions, nevertheless some candidates performed well on it.

### Question 10

This question required knowledge and understanding of the equation of exchange. Some candidates could not adequately express the quantity theory of money, otherwise, performance on the question was good.

## **Module 3**

This module dealt with foreign trade and commercial policy, the terms of trade, the balance of payments, the foreign exchange market, globalization and foreign direct investment.

### Question 11

This question required a knowledge of comparative advantage, gains from trade, tariffs and quotas. Performance on this question was good. The majority of candidates demonstrated a good understanding of the topics.

### Question 12

This question required candidates to calculate the terms of trade and demonstrate an understanding of trade liberalization and the process of economic integration in CARICOM. Candidates performed well on this question.

### Question 13

This question required an understanding of the computation of the balance of payments and the ability to distinguish between a deficit and a surplus. Most candidates performed well on the question; but a few candidates could not calculate the terms of trade.

### Question 14

This question required a knowledge and understanding of the foreign exchange market and different types of exchange rate systems. Some candidates understood part (a) of the question, but did not use the information given. However many responded accurately. Performance on the other parts of the question was good.

### Question 15

This question required a knowledge of transnational corporations, the advantages of foreign direct investment and the effects of globalization on trade and investment flows in the Caribbean. Performance on this question was good.

## **PAPER 02 - Essays**

This paper consisted of six questions, two per module. Candidates were required to answer one of two questions on each of the modules.

### **Module 1**

This module dealt with national income accounting, the calculation of the growth rate of GDP, national income equilibrium, the consumption function, the multiplier and aggregate demand and supply.

#### Question 1

In this question candidates' ability to calculate percentage changes in national income, identify, recessionary and inflationary gaps and identify the stages of the business cycle was assessed. Some candidates did not know how to perform the calculations, but most did the calculations correctly. Overall, performance on the question was satisfactory.

#### Question 2

This question required an understanding of the consumption function and the ability to calculate

- (a) the MPC;
- (b) the multiplier; and
- (c) the equilibrium level of income.

It also required an analysis of the effects of changes in the values of the variables that affect aggregate demand, supply and the price level. Some candidates found answering parts of this question very challenging. It appears that they did not grasp how to perform the calculations, draw and interpret the diagrams. Performance on the question was, however, satisfactory.

## **Module 2**

This module dealt with money and banking, budget deficits and the rational debt.

### Question 3

This question required a knowledge of the nature, role and functions of money. The question required an understanding of the process by which the banking system created credit and the relationship between the interest rate and the quantity of money supplied. Candidates responded well to the question except in two areas:

- (i) many encountered difficulty giving two examples of money;
- (ii) some could not calculate the money multiplier and show how the banking system creates \$900 of credit from a deposit of \$100.

Performance on the question was satisfactory.

### Question 4

This question required knowledge and understanding of fiscal policy, the relationship between budget deficits and the national debt and the burden the national debt places on future generations. Several parts of the question were done well, but some candidates could not state the relationship between budget deficits and the national debt. Some candidates had difficulty explaining how fiscal policies stimulate employment. Some candidates also could not explain the effect of a balanced budget on the equilibrium level of output. Overall performance on the question was good.

## **Module 3**

Module 3 dealt with growth versus development, the factors that cause economic growth and the costs and benefits of growth. This module also dealt with the determination of exchange rates.

### Question 5

This question required an understanding of economic growth and development and the ability to analyse and interpret information on growth and development. Candidates performed well on several parts of the question but two areas proved to be very challenging. Candidates had difficulty

- (i) discussing two benefits and two costs of growth; and
- (ii) listing and discussing three constraints to economic development of low income countries.

Performance on this question was fair.

### Question 6

This question required knowledge of the different types of exchange rates systems and the ability to analyse exchange rate issues. Many candidates scored full marks for Part (a) of this question, while several others did well on Part (b) which required higher-level competencies. Some candidates found the analysis of exchange rate movements very challenging. Overall performance on the question was satisfactory.

## **GENERAL/SPECIFIC RECOMMENDATION TO TEACHERS**

Teachers have achieved a great deal of success in the preparation of candidates for the Caribbean Advanced Proficiency Examinations in Economics.

Teachers are urged to seek methods of delivery that would make learning easier.

Teachers should ensure that the candidates taking the examination are fully prepared. Candidates should be made to understand the demands of the course from the inception and serious work should begin on the first day of the class. Teachers will find that it is a good investment to spend much of the first two or three weeks of the class on the quantitative techniques.

Candidates should be taught to draw and interpret diagrams and to calculate the slopes of lines, elasticity coefficients, multipliers, percentage changes. The diagram of the market; demand, supply, equilibrium price and quantity should be fully understood by candidates. Candidates should practise, practise, practise. Teachers should ensure that adequate assignments targeting the most challenging areas are done by the candidates.

## **INTERNAL ASSESSMENTS (IAs)**

Internal assessments required an extra effort from both teachers and candidates. In some cases candidates were required to do several projects, and some teachers are required to supervise a large number of SBAs. The link between Papers 01 and 02 and the SBA should be established so that the two are seen as reinforcing each other and not as conflicting. That is, the synergy between the two should be exploited.

- Teachers should exercise greater control over the topics chosen, assist the candidates in preparing an outline and exercise greater supervision of the project.
- Teachers should be guided by the rules set down in the syllabus.
- Some candidates did not comply with the word limit, but wrote lengthy papers. Some reports were not well presented. They lacked page numbering, a content page, a proper bibliography/references, headings and appendices. The font size was small (less than 12) and the spacing single (rather than double).

In many instances no attempt was made to evaluate the data presented and the modules were not integrated to form a whole.

Overall, performance in the SBAs was satisfactory and there was correlation between the teachers' marks and the moderators. With greater teacher guidance the SBAs should continue to improve.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION  
MAY/JUNE 2005**

**ECONOMICS**

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**ECONOMICS****CARIBBEAN ADVANCED PROFICIENCY EXAMINATION****MAY/JUNE 2005****GENERAL COMMENTS**

The majority of candidates performed well in this year's examination. However, there are areas of the syllabus which continue to pose challenges to some candidates.

**DETAILED COMMENTS****UNIT 01****Paper 01 – Short Answers**

This paper consists of fifteen compulsory short-answer questions, each worth six marks. There are five questions to each module. Performance on Paper 01 was good.

**Module 1**

The questions on this module tested candidates' appreciation of the links between some fundamental concepts of economics such as scarcity, choice, opportunity cost and efficiency.

**Question 1**

This question tested candidates' knowledge and understanding of the concepts "scarcity" and "opportunity costs" and candidates' ability to conduct analyses using these concepts. Seventy-five per cent of the candidates scored between four marks and the maximum six marks. The concepts tested are part of the foundation of the discipline and teachers must make every effort to ensure that they are perfectly understood by the candidates.

**Question 2**

This question required knowledge and understanding of "production possibilities frontier," the ability to draw it and to explain its various parts. Performance on this question was satisfactory, but many candidates showed incomplete knowledge of the concept.

**Question 3**

This question required knowledge of the factors that influence the demand for commodities, coffee in this case, and the way in which each factor influenced demand. Performance on this question was satisfactory.

### Question 4

This question required knowledge and understanding of “equilibrium” and how prices are determined in the market by the forces of demand and supply. Performance on this question was excellent.

### Question 5

This question required knowledge and understanding of average total and average variable costs and marginal costs, and the relationship among them. Although some candidates performed well on the question, far too many did not score high marks on this question. Teachers must be aware that this topic remains one of the most challenging to teach as well as to learn and, therefore, must use appropriate devices to impart their knowledge to their students.

## **Module 2**

The questions on this module dealt with the efficiency of the market system in the allocation of scarce resources, market structure and with market failure. The performance on this module was satisfactory.

### Question 6

This question required knowledge and understanding of the characteristics of two main types of market structures and the ability to analyse and evaluate them in terms of “efficiency”. Some candidates found this question to be quite challenging. Teachers must continue to encourage students to list the market types along with their characteristics to conduct comparisons. Performance on the question was satisfactory.

### Question 7

This question required knowledge of the structure, behaviour and performance of oligopolies and cartels. Performance on the question was satisfactory.

### Question 8

This question required knowledge and understanding of the forces responsible for the kinked demand curve. Most candidates were challenged by this question, but some were able to perform well on it.

### Question 9

This question required knowledge and understanding of the characteristics of “public goods”. Most candidates were well prepared for this question and performance was excellent.

### Question 10

This question required knowledge and understanding of the effect of “externalities”

on the efficiency on market allocation of resources. Candidates' performance on this question was satisfactory.

### **Module 3**

The questions on this module dealt with the market for resources, functional distribution of income and asymmetric information. Performance on the module was excellent.

#### Question 11

This question required knowledge and understanding of the link between the earnings of the factors of production and the cost of production. Performance on this question was excellent.

#### Question 12

This question required knowledge and understanding of "derived demand". While some candidates found this question challenging, others performed quite well on it. Performance on this question was generally satisfactory.

#### Question 13

This question required knowledge and understanding of the concepts, "poverty" and "basic needs". The candidates were adequately prepared for this question and their performance on it was excellent.

#### Question 14

This question required knowledge and understanding of the determination of wages and employment by the labour market. Eighty-one per cent of the candidates obtained between four and the maximum six marks.

#### Question 15

This question required knowledge and understanding of (i) the effects of migration on wages and (ii) "asymmetric information", "moral hazard" and "adverse selection". Performance on this question was excellent.

### **Paper 02 – Essays**

Paper 02 required higher-level competencies. Candidates were required to use their knowledge and understanding of basic economic theories, concepts and tools to analyse and evaluate economic policies and programmes. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 50 marks.

## **Module 1**

Module 1 dealt with the factors that influence demand, supply, market equilibrium, price and quantities of commodities traded. It also dealt with the production function, various cost concepts and how the producer decides on the optimum combinations of inputs to employ and the profit maximizing levels of outputs to produce.

### **Question 1**

This question required candidates to demonstrate knowledge and understanding of the “Law of Variable Proportions” and the “Law of Increasing Costs”. It also required knowledge of the decision rules governing output levels. Candidates' performance on this question was excellent.

### **Question 2**

This question required knowledge and understanding of the factors that cause demand and supply to change as distinct from the own-price that causes change in the quantities demanded and supplied to change. Candidates were required to conduct an analysis of the market for a commodity (digital cameras). Performance on this question was very good. However, some candidates did not give adequate definitions for demand and supply, while others confused factors that influence demand with those that influence supply. In addition, some candidates did not label the axes correctly.

## **Module 2**

This module required candidates to demonstrate knowledge and understanding of market structure, the influence of market structure on the efficiency with which resources are allocated, and the role of governments when markets fail.

### **Question 3**

This question required candidates to give definitions of key terms, to demonstrate understanding of the main types of market structures and to analyse the performance of these market structures. In some instances the definitions were too vague and candidates did not demonstrate enough familiarity with key economic terminologies, for example, economic profit and normal profit.

Performance on this question was good.

### **Question 4**

This question required candidates to demonstrate their understanding of and their ability to use important economic concepts related to market failure. Candidates were required to analyse a current economic issue of importance to the Caribbean (escalating petroleum prices), and to discuss the role of governments in resource allocation.

Some candidates performed well on this question, but many did not demonstrate adequate knowledge and understanding of this part of the syllabus. Basic knowledge of the few factors that cause market failure and their role in this process were not adequately demonstrated.

### **Module 3**

This module dealt with the distribution of income, measuring equity and the effect of inequality on the well-being of citizens. It also required candidates to demonstrate knowledge and understanding of the role of governments in improving the well-being of citizens, and the ability to analyse and evaluate welfare programmes. Candidates were also required to demonstrate understanding of the effects of asymmetric information on decision making.

#### **Question 5**

This question required candidates to demonstrate knowledge and understanding of inequality as one cause of poverty, the “Gini Coefficient” and “The Lorenz Curve”. Candidates were also required to analyse and evaluate government programmes aimed at reducing poverty. Some candidates found part (a) quite challenging and demonstrated limited familiarity with the “Gini Coefficient” and the “Lorenz Curve”. However, candidates’ performance on this question was satisfactory.

#### **Question 6**

This question required knowledge and understanding of social welfare, social welfare programmes and the motivation for such programmes. Candidates were also required to demonstrate knowledge and understanding of information asymmetry on decision-making and to analyse and evaluate the effects of a legal minimum wage. Performance on this question was good. However, many candidates encountered strong challenges in defining some of the terms and demonstrated little knowledge and understanding of minimum wages and their effects.

#### **Paper 03/1 - Internal Assessment - See page 12**

### **UNIT 2**

This Unit tested candidates’ knowledge and understanding of macroeconomics concepts and issues, and their ability to conduct analyses and evaluation of economic policies and programmes. Performance on this Unit was satisfactory.

#### **Paper 01 - Short Answers**

This paper consists of fifteen compulsory short-answer questions, divided into three modules of five questions each. Each question is worth six marks. Performance on the paper was satisfactory.

## Module 1

The questions on this module required candidates to demonstrate knowledge and understanding of national income accounting and the determination of national income equilibrium using the Keynesian framework. Candidates were also required to demonstrate knowledge and understanding of the MPC, the calculation of the multiplier, and inflationary and deflationary gaps.

### Question 1

This question required candidates to demonstrate knowledge and understanding of nominal and real GDP. Forty-six per cent of the candidates achieved between four and the maximum six marks for the question. However, some candidates did not give clear and precise definitions of key terms, and demonstrated little knowledge of the term, “base year”.

### Question 2

This question dealt with the items that enter into the computation of the GDP, using the expenditure method. Performance on the question was excellent. Seventy-three per cent of the candidates achieved between four and the six maximum possible marks.

### Question 3

This question required candidates to demonstrate the ability to calculate Savings, the MPC and the multiplier. Performance on this question was generally good, but some candidates found the calculations to be challenging.

### Question 4

This question required candidates to demonstrate knowledge and understanding of the Keynesian explanation of the determination of national income equilibrium. Performance on this question was good, but many candidates did not reproduce the “Keynesian Cross” nor were they able to identify the consumption function, dis-saving and saving correctly.

### Question 5

This question tested candidates’ knowledge and understanding of two major economic problems, inflationary and deflationary gaps. Performance on this question was good.

## Module 2

The questions on this module covered issues relating to money and banking, mone-

tary and fiscal policy, the burden of the national debt and its alleviation. Candidates performed well on the module.

#### Question 6

This question required candidates to demonstrate knowledge and understanding of the constituents of money, the relationship between the interest rate and money demand and the relationship between changes in the quantity of money and the price level. Performance on this question was good, although some candidates could not identify fiat money.

#### Question 7

This question required candidates to demonstrate knowledge and understanding of relationship between (i) budget deficits and the national debt and (ii) the MPS and the multiplier and to explain the relationships. Performance on the question was good, but some candidates did not give clear explanations of the relationships.

#### Question 8

This question required candidates to demonstrate knowledge and understanding of the tools at the Central Bank's disposal to expand the money supply, and how it uses the tools. Candidates were also required to calculate the reserves and excess reserves of a bank, given the deposits and the required reserve ratio. While some candidates performed well on this question, others were not familiar with how the tools at the disposal of the Bank are used to expand the money supply.

#### Question 9

This question required knowledge and understanding of fiscal policy lags, the balanced budget multiplier and budget deficits. Some candidates performed well on the question, but many were not knowledgeable about the fiscal policy lags and could not define the balanced budget multiplier.

#### Question 10

This question required knowledge and understanding of the national debt, the severity of the debt and debt rescheduling. Candidates performed well on this question. However, many of them were not well acquainted with the term "debt rescheduling".

### **Module 3**

This module dealt with the meaning, measurement and benefits of economic growth and economic development. It also required knowledge and understanding of comparative advantage as the basis of international trade and reasons for restricting international trade. Candidates were also required to demonstrate knowledge and understanding of the balance of payments, foreign exchange regimes and the determination of exchange rates by the market.

### Question 11

This question required candidates to demonstrate knowledge and understanding of the role of capital accumulation in economic development and the characteristics of Caribbean economies that act as hindrances to economic development. Performance on this question was good.

### Question 12

This question required candidates to demonstrate knowledge and understanding of economic growth and development, how the growth rate is measured and the costs and benefits of economic growth. Performance on the question was satisfactory. The major weakness demonstrated by candidates was that the definitions they gave were incomplete. There were also some candidates who were unable to say how growth was measured and to identify different types of capital.

### Question 13

This question tested candidates' knowledge and understanding of comparative advantage, the types of restrictions that countries put on trade and the reasons for doing so. Performance on the question was good with most of the candidates getting fifty per cent or more of the marks.

### Question 14

This question required candidates to demonstrate knowledge and understanding of entries in the balance of payments, of the accounts making up the balance of payments and their calculation. Performance on this question was excellent.

### Question 15

This question required candidates to demonstrate knowledge and understanding of exchange rate regimes and the calculation and determination of exchange rates. Performance on this question was good, however many candidates did not demonstrate an adequate grasp of the concepts, "appreciation and depreciation".

## **Paper 02 – Essays**

This paper consisted of six questions, two per module. Candidates were required to answer one question from each module. Performance on this paper was satisfactory.

### **Module 1**

This module dealt with issues surrounding, (i) national income accounting and (ii) using a small model of the economy to derive the equilibrium amounts of income, expenditure and some key parameters of the economy.

### Question 1

This question required that candidates demonstrate knowledge and understanding of the calculation of GDP using the income and expenditure approach, and the concept of “double counting”. Although performance on this question was good, some candidates did not demonstrate adequate knowledge and understanding of the approaches.

### Question 2

This question tested candidates’ knowledge and understanding of how to use a small model to derive the equilibrium amounts of income and expenditure, the MPS, MPC, and the multiplier. Candidates were also required to plot the consumption function. Performance on the question was unsatisfactory. Several candidates were not able to perform the calculations and plot the consumption function accurately.

## **Module 2**

This module dealt with monetary and fiscal policy and the effect of a country’s national debt on several variables. Performance on the question was satisfactory.

### Question 3

This question required that candidates demonstrate knowledge and understanding of monetary concepts and theory, the role of the central bank in the management of the economy and determinants of the transactions demand for money. Performance on this question was satisfactory. However, some candidates could not explain how leakages impact the money expansion process.

### Question 4

This question dealt with measurement of the national debt, measures to reduce the debt burden and the effect of the debt on the other economic variables. Candidates were also required to demonstrate knowledge and understanding of the formulation and goals of fiscal policy. Performance on the question was unsatisfactory. Several candidates were not clear about the effect of deficits on other economic variables.

## **Module 3**

This module dealt with sources of economic growth, the effect of globalization on Caribbean economies, the balance of payments and exchange rate regimes. Performance on the module was satisfactory.

### Question 5

This question required candidates to demonstrate knowledge and understanding of the sources of economic growth, the major features of globalization, and their effects on Caribbean economies. Performance on this question was satisfactory, although some candidates encountered difficulties analysing and evaluating the issues.

### Question 6

This question required that candidates demonstrate knowledge and understanding of the items that comprise the accounts of the balance of payments and exchange rates. Candidates were also required to analyse and evaluate issues surrounding the exchange rate regimes and the balance of payments. Performance on this question was satisfactory. However, some candidates encountered difficulties computing the balance of payments.

### **Paper 03 - Internal Assessment for Units 1 and 2**

There was an improvement in the quality of the internal assessment samples moderated this year. However, there were some projects which did not measure up to the expected standard. While it is appreciated that some candidates offer several subjects at the CAPE, and that the three elements of each subject could impose heavy demands on the candidates, efforts must be made to exploit the synergies among the elements of the examination, by treating them as complementary rather than conflicting.

The good projects were characterized by excellent organization and presentation. For some projects, the topic was either absent or unclear, as were the objectives of the research and the issues addressed. Some candidates submitted statistics and tables which were not used in the analyses.

Another area of concern is plagiarising and not acknowledging the work done by others.

Teachers have a critical role to play in ensuring that candidates produce projects of the highest quality. This can be achieved by monitoring, guiding and advising candidates. Candidates should be assisted to choose their topics and to develop an outline the road map that guides the candidate along the way to the final product. This approach would help candidates avoid topics that are too broad in scope and unfocused.

Teachers too should follow the guidelines in all aspects of the exercise; ensuring that attention is paid to each module, in awarding marks, completing the moderation forms and submitting forms and papers.

Some further recommendations for the improvement of the papers are as follows:

- Candidates should adhere strictly to word limit of the project.
- Certain skills should be emphasized; analysis, synthesis, application and evaluation.
- Candidates should make greater use of primary data.
- The three modules should be closely integrated, rather than be presented as stand alone essays.

## RECOMMENDATIONS TO TEACHERS

Teachers have adjusted admirably to the demands of the CAPE in Economics. There is evidence of some degree of improvement in candidates' performance. Teachers are encouraged to make learning more attractive.

Economics is based on robust logical reasoning and may be deceptive to the unwary person. Candidates need to pay close attention to the terms, concepts and theories, so that they could develop a facility in explaining them.

Economics requires strong quantitative tools and teachers should invest time in developing these tools, which should be put to use throughout the course of study. Tabular, numerical and graphical techniques should be emphasized. Students must be trained to label axes and curves when drawing diagrams. Increasingly there will be the requirement to plot curves.

There are some terms, concepts and theories which are the tools of the trade: the calculation of slopes, elasticity coefficients, multipliers, percentages, rates of growth, demand, supply, equilibrium price and quantity, the Keynesian Cross (the 45 degree line diagram) used to show national income equilibrium must be thoroughly understood.

The decision rules must be understood. Students should not only know that output occurs where  $MR = MC$ , or that the  $MC$  curve cuts  $AR$  curve at its lowest point, but they should know why.

Teachers should ensure that adequate assignments targeting the most challenging aspects of the subject matter are done by their students.

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**REPORT ON CANDIDATES' WORK IN THE  
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MAY/JUNE 2006**

**ECONOMICS**

## ECONOMICS

### CARIBBEAN ADVANCED PROFICIENCY EXAMINATION

MAY/JUNE 2006

#### GENERAL COMMENTS

Candidate entry for both units of the CAPE Economics examination in 2006 increased by 70 per cent over the 2005 figure of 2 783. However, performance in 2006 did not match the excellence achieved in 2005. The examination proved extremely challenging for the least prepared candidates, while those who were obviously better prepared were able to achieve higher grades.

#### DETAILED COMMENTS

##### UNIT 1

###### Paper 01 – Short Answers

This paper consisted of fifteen compulsory questions divided into three modules of five questions each. Each question was worth six marks. Some aspects of the syllabus continued to be challenging to the candidates, but overall performance on Paper 01 was satisfactory.

###### Module 01 – Methodology of Economics and Demand and Supply Analysis

This module tested candidates' appreciation of some fundamental economic concepts. These included opportunity cost, consumer behaviour, demand, supply, equilibrium, elasticity of demand, utility, cost of production. Performance on this module was satisfactory with candidates receiving a mean mark of 17.49 out of a maximum 30 marks.

###### Question 1

This question tested candidates' knowledge and understanding of two basic concepts: scarcity and opportunity cost and their ability to apply them. While many candidates demonstrated sound knowledge of these concepts, others were severely challenged especially by the application. Seventy-five per cent of candidates scored between four and the maximum six marks.

###### Question 2

This question required knowledge and understanding of market demand, supply, equilibrium and shortage and the ability to calculate the slope of a supply curve. Seventy-two per cent of candidates scored four marks and above, but few actually scored full marks. Candidates should be encouraged to work with demand and supply tables, identifying equilibrium price and quantity and transforming data into line graphs.

### Question 3

This question required knowledge of the concept elasticity and the ability to use the elasticity formula. This question proved challenging for many candidates with many not knowing the factors that determine the elasticity of demand. Elasticity is an important concept and teachers should ensure that candidates can demonstrate full understanding of the concept.

### Question 4

Although candidate performance on this question was satisfactory, there were many candidates who did not have the required knowledge and understanding of the utility approach to consumer choice. Many candidates understood the concepts but could not relate marginal utility to the price of a commodity.

### Question 5

This question required candidates to use their knowledge of cost of production to calculate total, average and marginal costs given levels of output and the related total fixed and total variable costs. Performance on the question was excellent with 72 per cent of candidates scoring between four and the maximum six marks.

## **Module 2 – Market Structure and Market Failure**

This module dealt with the efficiency of the market system in allocating scarce resources, market structure, market failure, indices of market concentration and the role of multinational corporations in the Caribbean. Candidates did not perform as well on this module as they did in Module 1. Mean mark on the module was 14.49 out of a maximum 30 marks.

### Question 6

This question required knowledge and understanding of the different market structures. Candidates' performance on this question was satisfactory but many candidates could not identify the behaviour of the different types of market structures. Fifty-one per cent of the candidates scored between four and six marks.

### Question 7

This question required knowledge and understanding of decision-making in perfectly competitive firms in the long-run and short-run and the difference between normal and economic profits. Candidates' performance on the question showed that they found it challenging with twenty-seven per cent scoring between four and six marks. Teachers are encouraged to get the candidates to spend more time on drawing graphs and using them in analyses.

### Question 8

This question required knowledge and understanding of multinational corporations (MNCs) and their impact on the economies of CARICOM. Candidates' performance on this question was satisfactory although some of them confused resources with benefits.

### Question 9

This question required knowledge and understanding of 'market structure' and 'market failure' and the ability to identify types of market structure by performance. Although some candidates failed to associate market failure with inefficiency, the overall performance on this question was satisfactory.

#### Question 10

This question required knowledge and understanding of measures of industrial concentration and the major reason for subsidising goods with positive externality. Most candidates found this question very challenging, in particular, Part (c) that dealt with the subsidy for positive externality. Only 39 per cent of candidates scored between four and six marks on this question.

#### **Module 3 – Distribution Theory and Applications of Recent Theoretical Developments**

This module dealt with the marginal productivity theory, factor rewards, income distribution and poverty and asymmetric information. Performance on this module was not up to the standard of the other two modules. The mean mark on this module was 13.62.

#### Question 11

This question required knowledge and understanding of factor rewards and their determination. Although many candidates did not know the relationship between the prices of factors and the prices of the goods produced by the factors, overall performance on the question was satisfactory.

#### Question 12

The most challenging question (in terms of candidate performance) required knowledge and understanding of the marginal productivity theory of wages and the division of wages between transfer earning and rent. Only 23 per cent of candidates scored between four and six marks on this question. Teachers are advised to spend an adequate amount of time on this area of the syllabus.

#### Question 13

This was another challenging question for candidates. It required knowledge and understanding of the labour force, labour supply and the labour force participation rate. Some candidates performed well on this question (20 per cent earning between four and six marks), but many did not demonstrate enough knowledge of the terms.

#### Question 14

This question required knowledge and understanding of relative and absolute poverty and the Gini coefficient as a measure of the distribution of income and wealth. Although some candidates did not demonstrate the precision required but overall performance on this question was excellent.

#### Question 15

This question required knowledge and understanding of moral hazard, adverse selection and poverty alleviation policy. Some candidates did not demonstrate adequate knowledge of these topics but on the whole performance on the question was satisfactory.

#### **Paper 02 – Essays**

Paper 02 consisted of six essay questions requiring higher-level competencies. Candidates were required to employ economic tools, their knowledge, understanding and analytical skills to evaluate economic policies and programmes.

Candidates were required to answer one of two questions from each of the three modules. Each question was worth 50 marks. Performance on Paper 02 was quite satisfactory.

### **Module 01 – Methodology of Economics and Demand and Supply Analysis**

This module dealt with the market, demand, supply and equilibrium, the effects of government intervention in the market, the production function and the stages of production, returns to scale, economies of scale and the law of diminishing returns.

#### Question 1

This was the more popular of the two questions on this Module. It required candidates to demonstrate knowledge and understanding of the factors that influence demand and supply, the efficiency of the market, allocation of scarce resources and the effect of government intervention on the operations of the free market. Most candidates performed satisfactorily on the question but for some, the analysis of a price ceiling, Part (c), was a serious challenge. The mean mark on this question was 27.60 out of a maximum of 50 marks.

#### Question 2

This question required knowledge and understanding of the production function, the relationship between the average and the marginal products, the stages of production, economies of large scale production and returns to scale. Overall performance on the question was less than satisfactory with candidates obtaining a mean mark of 19.72 out of a possible 50 marks. Candidates who attempted this question experienced difficulty in explaining basic economic concepts such as constant returns to scale (which occurs when a proportional change in all of a firm's inputs results in the same proportional change in output); increasing returns to scale (which occurs when a proportional change in all of a firm's inputs results in a greater proportional change in output).

### **Module 2 – Market Structure and Market Failure**

This module dealt with market structure and market failure, the relationship between structure, conduct and performance in the short and long-run, the causes of market failure and government policy to correct market failure.

#### Question 3

This was the best answered of the questions on Paper 02 with 73 per cent of candidates scoring above 25 marks. This question required knowledge and understanding of the types of market structures, their differences and similarities and how these affect decision making and performance. Candidates generally performed well on all parts of the question.

#### Question 4

This question required knowledge and understanding of market failure, how it is caused and what policies government can implement to correct it. Performance on this question was satisfactory, although there were areas that posed challenges for candidates. The free rider problem was not well understood and government intervention in the face of market failure was also not well understood. The better prepared candidates were able to state that the market might fail to provide efficient quantities of public goods because of the free rider problem, whereby the free rider consumed a good without paying for it. Because of the lack of enthusiasm among private investors to produce such a good, government would intervene to ensure that adequate amounts of the good were produced.

### **Module 3 – Distribution Theory and Applications of Recent Theoretical Developments**

This module dealt with the marginal productivity theory of distribution, measuring inequality, the labour supply curve, the poverty line, factors that contribute to poverty and the evaluation of government policies aimed at alleviating poverty.

#### **Question 5**

This was the less popular of the two questions on this module. The question required knowledge of the factors of production and marginal productivity theory. Performance of candidates was satisfactory. Fifty-four per cent of candidates scored above 25.

#### **Question 6**

This question required knowledge and understanding of the poverty line, the factors that contribute to poverty and the ability to evaluate welfare programmes and other government initiatives to alleviate poverty. This question was very popular and many candidates performed well on it. Sixty-eight per cent of candidates scored between 26 and the maximum 50 marks on the question.

### **Paper 032 – Alternative Paper**

This paper consisted of three questions each worth 20 marks. The questions were based on activities in the construction sector.

#### **Question 1**

This question required knowledge and understanding of the nature of the sector, the products, their demand and supply and the effect of rent control on the sector. Some candidates were prepared and performed satisfactorily on the question. However, others were severely challenged.

#### **Question 2**

This question required knowledge and understanding of market structure, market failure, market concentration and the measurement of concentration and measures that government may implement to achieve efficiency. Some candidates performed satisfactorily on this question. However, many candidates seemed not to have been prepared.

#### **Question 3**

This question required knowledge and understanding of the effects of regional migration on earnings of employees in the construction sector, income distribution and social welfare. Performance on this question was very good.

### **UNIT 2**

This Unit required knowledge and understanding of macroeconomic concepts and issues and the ability to analyse and evaluate economic policies and programmes. Performance on this Unit was satisfactory.

### **Paper 01 – Short Answers**

This paper consisted of 15 compulsory questions divided into three modules of five questions each. Each question was worth six marks. Performance on the paper was satisfactory.

## **Module 1 – Models of the Macroeconomy**

The questions on this module required knowledge and understanding of national income accounting and the determination of national income determination within the Keynesian framework, the calculation of the MPC, illustration and analysis of the inflationary gap. Performance on this module was satisfactory with candidates obtaining a mean mark of 16.80 out of a maximum 30 marks.

### Question 1

This was the best answered question in this module and required knowledge and understanding of balance of payments, the exchange rate and inflation. Many candidates demonstrated adequate knowledge of the topics but some were severely challenged with a measure for inflation. Performance on this question was excellent with 84 per cent of candidates scoring above three marks.

### Question 2

This question required knowledge and understanding of national income accounting and its limitation as a measure of well-being. Most candidates had the required knowledge. Performance on this question was satisfactory.

### Question 3

This question was also well answered by candidates. It required knowledge and understanding of the determination of the equilibrium level of national income, calculation of the MPC and the multiplier. Some candidates were severely challenged by these concepts but most were able to perform the calculations. Performance on this question was good with 56 per cent of candidates scoring between four and six marks.

### Question 4

This question required knowledge and understanding of the terms ‘saving’ and ‘investment’, their relationship at equilibrium and the Keynesian aggregate supply curve. Performance on this question was satisfactory but the less prepared candidates found the terms very challenging. However, candidates who were adequately exposed to this part of the syllabus performed well.

### Question 5

Candidates generally performed poorly on this question which required knowledge and understanding of full employment, the inflationary gap, the recessionary gap and the causes of the volatility of investment. Many candidates could not draw the diagram illustrating the inflationary gap or give the explanation for the volatility of investment.

## **Module 2 – Macroeconomic Policy Analysis**

This module dealt with the nature, composition and functions of money, the effectiveness of monetary and fiscal policy measures, budget deficits, surpluses and the burden of the national debt. Candidates performed their weakest on this module. The mean mark on this module was 13.20 out of a maximum 30 marks.

### Question 6

This question required knowledge and understanding of money, fiat money and commodity money and the functions of money. Performance on this question was satisfactory, but some candidates showed little knowledge of the difference between fiat and commodity money.

#### Question 7

This question required knowledge and understanding of the demand for money and the supply of money. Candidates were required to distinguish between M1 and M2. Many of the candidates knew the components of M1 but not M2. While those candidates who were adequately exposed to the concepts did well, the majority performed poorly on this question.

#### Question 8

This question required knowledge and understanding of monetary policy, the goals of expansionary monetary policy and the tools used by the Central Bank to control money supply. Most candidates were familiar with the concepts but some who were adequately exposed did not perform well. Some candidates could not explain that the main goal of expansionary fiscal policy is to stimulate aggregate demand in the economy by increasing the money supply. However, performance on this question was satisfactory.

#### Question 9

This question posed the most difficulty to candidates. It required knowledge and understanding of the effect of expansionary fiscal policy during a recession and the lags associated with fiscal policy. Most candidates performed poorly on the question, being unable to argue that under the circumstances expansionary fiscal would increase aggregate income. Many were confused when dealing with the policy lags.

#### Question 10

This question required knowledge and understanding of the national debt, budget deficit and budget surplus. Candidates demonstrated a high level of competence in answering this question. Performance on this question was fairly good, with 60 per cent of candidates scoring between four and six marks.

### **Module 3 – Growth, Development and International Economic Relations**

This module dealt with the factors that promote and hinder development of the Caribbean economies, arguments for and against free trade, foreign exchange rates and evaluation of foreign direct investment in the region. Performance on the module was satisfactory with candidates obtaining a mean of 14.59 out of the maximum 30 marks.

#### Question 11

This question required knowledge and understanding of the characteristics of Caribbean economies and the factors that constrain their development. Most candidates were not as familiar with the Caribbean economies and the factors constraining their development as they ought to have been. Performance on this question was less than satisfactory, with only 15 per cent of candidates obtaining between four and six marks.

#### Question 12

This question required knowledge and understanding of the theory of foreign trade, restrictions on foreign trade and Caribbean imports and exports. Candidates demonstrated familiarity with the concepts though some were not too comfortable with the term ‘export subsidies’. Performance on the question was fairly good.

### Question 13

This question required knowledge and understanding of the arguments for and against free trade. Performance on this question was good. It was evident that candidates had done this thoroughly in the classroom situation.

### Question 14

This question required knowledge and understanding of the relationship between the prices of traded goods and the exchange rates. This question proved challenging for many candidates. Candidates should be adequately exposed to the determination of exchange rates and the influence of exchange rates on imports and exports.

### Question 15

This question required knowledge and understanding of the nature of ‘foreign direct investment’, its advantages and disadvantages and the forms it takes. Many candidates performed well on this question but some candidates demonstrated only passing knowledge of the material. Performance on this question was satisfactory.

## **Paper 02 – Essays**

This paper consisted of six questions, requiring higher level competencies. Candidates were required to answer one of two questions from each of the three Modules. Each question was worth 50 marks. Performance on this paper was less than satisfactory.

### **Module 1 – Models of the Macro economy**

This module dealt with national income accounting, the determination of national income equilibrium, comparative statistics and the investment function.

#### Question 1

This question required knowledge and understanding of transfer payments, the computation and use of price indices to deflate nominal income to real income, criticism of GDP as a measure of well-being and the computation of various measures of national income. Many candidates performed well on the question, but those not familiar with the literature experienced severe challenges. Performance on the question was less than satisfactory.

#### Question 2

This question tested candidates’ knowledge and understanding of key macroeconomic terms, their ability to analyse the impacts of changes in taxes, money supply and oil prices on equilibrium price and quantity under various circumstances and to explain the relationship between investment and variability profits and expectations. Performance on this question was less than satisfactory.

### **Module 2 – Macroeconomic Policy Analysis**

This module dealt with fiscal policy and monetary policy. Performance on the module was less than satisfactory.

### Question 3

This question required knowledge and understanding of the operations of discretionary policy and automatic stabilizers and how they can be used to solve macroeconomic problems such as unemployment. Candidates were required to do the arithmetic and draw the diagram associated with closing a recessionary gap of a given size and MPC. They were also required to demonstrate competence in using the concept of a balanced budget and a balanced budget multiplier. Candidates performed well on some aspects of the question but found the parts requiring higher level competencies very challenging.

### Question 4

This question required knowledge and understanding of the nature of money, the role of money, the components of the demand for money and the determination of the interest rate. While performance on this question was better than on question three, overall performance was still not of an acceptable standard. Many candidates misinterpreted Part (b) on ‘fiat money’.

### **Module 3 – Growth, Development and International Economic Relations**

This module dealt with trade and commercial policy, the effects of trade restrictions on output, employment and welfare. It also tested candidates’ knowledge and understanding of the stages of economic integration including the CSME. Performance on the module was satisfactory.

### Question 5

This question required knowledge and understanding of the effects of free trade on a hitherto closed economy and the ability to illustrate these effects on a demand and supply diagram. Candidates were severely challenged by this question and, in particular, many candidates could not illustrate net welfare loss on a diagram. However, performance on the other parts of the question was encouraging and overall performance was satisfactory.

### Question 6

This question required knowledge and understanding of the stages of economic integration and CARICOM, the CSME and the FTA. Performance on this question was satisfactory but many candidates were unable to define the main terms.

### **Paper 031 - Internal Assessments for Units 1 and 2**

The quality of the internal assessments improved this year. The better projects were characterized by good organization and integration of data and diagrams with prose.

There was vast improvement in the Internal Assessment projects.

- Presentation was improved as candidates made good use of presentation technology.
- Candidates showed greater knowledge of the topics chosen.
- Teachers showed more consistency in marking.
- The requirements for the selection of samples were met.

Some projects were weak however in the areas below:

- They lacked content and data presented were not analysed.
- Some projects exceeded the word limit without penalty.
- Sources of data and other material quoted were not supplied.
- Some topics were too general and incoherent.

Some projects did not fully meet the requirements set for internal assessments. Many candidates did not label their diagrams correctly while some presented data that had little or no relationship to their topics. A significant proportion of the candidates did not seize opportunities presented for using the data that they collected to generate relevant graphs. Some candidates wrote their aims and objectives directly from the syllabus instead of using them as guides for developing suitable topic-related ones.

Candidates should be encouraged to adopt a more problem-solving approach and to include warranted recommendations arising out of their study.

Teachers are advised to ensure that their assessment of candidates' projects follow the criteria established in the "Moderation of Internal Assessment" sheets in order to give students the correct feedback. They should not modify the mark scheme on the sheets and should ensure that they have the most recent version.

Teachers are critical in the process of guiding candidates so that they can produce excellent projects. From the first day of class the requirement of the unit should be established. Students should be guided and required to develop an outline to facilitate the choice of topics that are not too broad in scope and timeframes that render the process of supervision manageable. Candidates should not use outdated data to arrive at conclusions about present realities. Overall, the internal assessment projects were satisfactory.

### **Paper 032 – Alternative Paper**

This paper dealt with the CARICOM Single Market and Economy and required candidates to analyse issues arising out of the establishment of the CSME. Candidates were also required to evaluate the policy issues. Some candidates performed satisfactorily on this paper but others were severely challenged.

#### **Question 1**

This question required knowledge and understanding of goals of the CSME, their effects on the economies of CARICOM Member States and the ability to distinguish between macroeconomic and microeconomic issues. Some candidates performed well on the question but others were unprepared and so were severely challenged.

#### **Question 2**

This question required knowledge and understanding of monetary policy and fiscal policy, the harmonization of monetary and fiscal policy of Member States and the advantages and disadvantages of policy harmonisation to Member States. Some candidates performed satisfactorily but others found the question very challenging.

#### **Question 3**

This question required knowledge and understanding of the provisions of the CSME, the free movement of labour, trade restrictions, the demand and supply of foreign currencies and the determination of exchange rates. Although many candidates performed well on this question, many others were not knowledgeable about the provisions of the CSME. Overall performance on this question was satisfactory.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION  
MAY/JUNE 2007**

**ECONOMICS**

**ECONOMICS**  
**CARIBBEAN ADVANCED PROFICIENCY EXAMINATION**  
**MAY/ JUNE 2007**  
**GENERAL COMMENTS**

The candidates' overall performance this year was quite satisfactory, but did not attain the desired level of excellence. Performance on Unit 1 was good compared to performance on Unit 2. The syllabus provided an adequate degree of challenge to the candidates. Notwithstanding, many candidates performed in the good – excellent range.

**DETAILED COMMENTS**

**UNIT 1**

**Paper 01 – Multiple Choice**

Candidates' overall performance in this paper was quite good, and in some instances, excellent. Paper 01 for the first time adopted the multiple-choice format. It consisted of 45 items, with 15 items on each Module. The range of items provided adequate syllabus coverage and tested various levels of difficulty. The mean score compared favourably with that of the former structured Paper 01. The reliability of the present paper was very good.

**Module 1 - Methodology of Economics and Demand and Supply Analysis**

This Module addressed some of the fundamental concepts of economics such as scarcity, choice, opportunity cost, efficiency, the market, demand, supply and equilibrium. Performance in this Module was satisfactory.

**Module 2 – Market Structure and Market Failure**

This Module dealt with the efficiency with which the market system allocates scarce resources and included market structure and market failure. Performance in this Module was also satisfactory.

**Module 3 – Distribution Theory and Applications of Recent Theoretical Developments**

This Module dealt with a number of popular issues such as the size and functional distribution of income, inequality and poverty. Performance in the Module was satisfactory.

**Paper 02 – Essays**

This paper tested the higher-level competencies of the candidates, giving them the opportunity to combine their knowledge and understanding of basic economic terms, concepts and tools with their ability to analyse economic issues and evaluate economic policies and programmes.

Candidates were required to answer one of two questions in each of the three Modules. Each question was worth 50 marks.

**Module 1 - Methodology of Economics and Demand and Supply Analysis**

Module 1 dealt with decision making by consumers/households and the combining of inputs by firms/businesses to produce outputs. It also dealt with the cost of production.

### Question 1

This question required candidates to demonstrate their knowledge and understanding of how consumers choose to spend their income among different goods and services given the prices of the goods using the marginal utility approach. Candidates were also tested on their comprehension and analytical ability regarding the factors affecting demand and supply, market allocation of commodities and the distortions and social implications accompanying government intervention in terms of price ceilings. Performance on this question was generally good although some candidates found the question challenging. Some of them could not calculate marginal utility and the marginal utility per dollar needed to decide on the quantity of each good the consumer would purchase. Some candidates could not draw a diagram showing the price ceiling and analyse the results of the ceiling imposed on the housing market.

### Question 2

This question required knowledge and understanding of various concepts, including the production function; total, average, and marginal products; total average and marginal costs. Performance on this question was satisfactory. Candidates found explaining the relationship between the average physical product curve and the marginal physical product curve most challenging. Candidates should be encouraged to approach these concepts using the verbal, arithmetical and graphical methods. Candidates ought to go deeper into the relationships among the concepts; the relationship between the marginal and average product and cost (curves), question (c), the shape of various products and cost curves, question (d), the demand and supply curves and the calculation and meaning of the elasticity of demand supply.

## **Module 2 – Market Structure and Market Failure**

This Module tested the ability of candidates to compare the main types of market structures (perfect competition, monopoly, oligopoly and monopolistic competition); analyse their effects on efficient resource allocation; discuss the measures used to correct market failure; analyse the effect of a unit tax on cigarettes on the efficiency of market allocation of cigarettes; understand consumer surplus and deadweight loss. Candidates found the questions quite challenging.

### Question 3

This question required that candidates demonstrate knowledge and understanding of market structures, the assumptions of perfect competition and the comparison of two market structures. Candidates were required to draw a diagram showing the effects of a tax on price, quantity, consumer surplus and deadweight loss. Many candidates' performance in this question was good, but some candidates could not draw the required diagram and show deadweight loss and consumer surplus. A tax is likely to reduce consumer and producer surplus and cause a deadweight net loss or a loss of welfare, and candidates ought to be able to present the arguments.

### Question 4

This question required knowledge and understanding of the causes of market failure in the sense of the Pareto efficiency criteria and relate them to the candidates' country. Candidates were also required to evaluate the effectiveness of measures that their government had implemented to correct market failure. Most candidates could say what market failure meant, but could not give the causes of it nor could they list and discuss the measures put in place by the government to correct market failure. Some of the stronger candidates were able to discuss factors such as public goods, externalities, natural monopolies and asymmetric information that cause market failure and the measures available to deal with these factors. Some candidates performed well on the question, but many found it very challenging.

### **Module 3 - Distribution Theory and Applications of Recent Theoretical Developments**

Module 3 required the ability to analyse and evaluate issues surrounding the distribution of income; size and functional distribution of income. It also required knowledge and understanding of concepts and issues associated with income distribution, the measurement of inequality and factors that contribute to social welfare and poverty.

#### Question 5

In this question candidates were required to demonstrate knowledge and understanding of the Lorenz curve and to interpret the Lorenz curve diagram. They were also required to distinguish between absolute and relative poverty and discuss the effect of subsidies to the education sector on social welfare. Candidates' performance on this question was fair. The number of candidates who handled this question well was very small. Many candidates were not prepared to give a clear distinction between absolute and relative poverty. Many candidates also exhibited scant knowledge of the Lorenz curve, not being able to identify its components and their importance even though a picture of it was included on the question paper.

#### Question 6

This question required a knowledge and understanding of factor markets; including concepts such as the value of the marginal product of labour, the labour force, the potential labour force, rent and transfer earnings and the relationship between factor shares and costs. Many candidates were able to do the relevant calculations, but others showed very little facility with the concepts.

## **UNIT 2**

Unit 2 dealt with macroeconomic concepts and issues. Many of the candidates demonstrated a fair grasp of the subject matter. Their responses to most of the questions were of a good quality.

### **Paper 01 – Multiple Choice**

Candidates' overall performance in this paper was good, and in some instances, excellent. Paper 01 for the first time adopted the multiple-choice format. It consisted of 45 items, with 15 items on each Module. The range of items provided adequate syllabus coverage and tested various levels of difficulty. The mean score was much higher than what was normally seen in the former structured Paper 01. The reliability of the present paper was very good.

### **Module 1 – Models of the Macroeconomy**

This Module required candidates to demonstrate a good understanding of national income accounting, the components of aggregate demand (expenditure), the classical and Keynesian economic models, national income equilibrium, recessionary and inflationary gaps.

### **Module 2 – Macroeconomic Policy Analysis**

Module 2 covered the nature of money its measurement, money demand and supply, the role of the central bank, monetary and fiscal policy, servicing the national debt and the quantity theory.

### **Module 3 – Growth, Development and International Economic Relations**

This Module dealt with foreign trade and commercial policy, the terms of trade, the balance of payments, the foreign exchange market, regional integration, globalisation and foreign direct investment.

## **Paper 02 – Essays**

This paper consisted of 6 questions with candidates being required to answer one of two questions on each of the three Modules.

### **Module 1– Models of the Macroeconomy**

This Module dealt with national income accounting, the limitations of GDP as a measure of well-being, national income equilibrium, the determinants of aggregate demand and supply savings and investments and the volatility of investments. Candidate performance was in the range of acceptable.

#### **Question 1**

This question required knowledge of the computation of national income using the income and expenditure approaches. Candidates were also required to show understanding of the consumer price index, the GDP deflator and the reasons for the GDP being a poor measure of well-being. Candidates' performance on this question was generally acceptable. However, many candidates showed little knowledge of the difference between the income and expenditure approaches. Many also could not explain the indices and the shortcomings of the GDP as a measure of well-being.

#### **Question 2**

This question required knowledge of the factors that determine aggregate demand and aggregate supply. Candidates were also required to discuss the reasons for the volatility of investment, explain the relationship between savings and investments and the difference between inflationary and recessionary gaps. Some candidates found answering parts of this question very challenging. It appears that they did not grasp how to perform the calculations and draw and interpret the required diagrams. Performance on the question was weak.

### **Module 2 – Macroeconomic Policy Analysis**

This Module dealt with money and banking, budget deficits and the rational debt, currency substitution, the use of monetary and fiscal policy tools to influence the level of employment and output. Performance on this Module was in the acceptable range.

#### **Question 3**

This question required knowledge and understanding of the nature, role and functions of money and the process by which banks create money. Most candidates showed good knowledge of nature, functions and demand for money, but many had little or no understanding of the money creation process. Regarding monetary policy instruments and their potency, many candidates could not state the main tools and discuss their relative ineffectiveness in the context of the Caribbean. Performance on the question was acceptable.

#### **Question 4**

This question required knowledge and understanding of how monetary and fiscal policy work to increase output and employment. This question was not popular with candidates, but those who attempted it performed better than those who chose the alternative. Performance on this question was satisfactory.

### **Module 3 – Growth, Development and International Economic Relations**

Module 3 dealt with regional integration and globalisation as well as protectionism, determination of exchange rates and the advantages and disadvantages of the fixed and free-floating exchange rate systems. Candidates produced a weak performance on this Module.

#### **Question 5**

This question required knowledge and understanding of economic integration, its benefits and costs and the stages of integration of CARICOM up to the CSME. Candidates were also required to discuss the forces driving globalisation. While candidates understood what integration and globalisation are and could identify the benefits and costs, their discussions of the topics were inadequate. Performance on this question was acceptable.

#### **Question 6**

This question required knowledge and understanding of arguments for protection of the CARICOM market, the determination of fixed and floating exchange rates and their advantages and disadvantages. Many candidates performed well on the part of the question dealing with protection and could say how exchange rates were determined. However, most of them could not identify the advantages and disadvantages of these systems. Overall performance on the question was weak.

### **Recommendations to Teachers**

Teachers have achieved a great deal of success in the preparation of candidates for the examination in CAPE Economics. However, there is evidence that many candidates were not ready for the examination. Though they had a good grip on the knowledge aspects of the questions, they lacked the higher level competencies required to excel in the examination.

Teachers should ensure that the candidates taking the examination are fully prepared. This should take approximately 130 hours. Candidates should be made to understand the demands of the course from the inception. Teachers will find that it is a good investment to spend much of the first two or three weeks of the class on the quantitative techniques, graphs and tables. The following is worth repeating.

Candidates should be taught to draw and interpret diagrams and to calculate the slopes of lines, elasticity coefficients, multipliers, percentage changes. The diagram of the market, demand, supply, equilibrium price and quantity should be fully understood by candidates. Teachers should ensure that adequate assignments targeting the most challenging areas are done by the candidates.

### **Paper 031 - Internal Assessments for Units 1 and 2**

Candidates' performance on the Internal Assessment was of a good standard this year, reflecting greater teacher participation in school-based projects. There was evidence that teachers were able to exercise greater control over the process - the topics chosen, the research methodology, preparation of the outline and exercising overall greater supervision of the project. Teachers, and ultimately candidates, came to appreciate the synergy among Papers 01, Paper 02 and Paper 031; they reinforce one another and are not conflicting.

Teachers' marking was generally consistent with moderators' and overall there was general improvement in all categories, including data, graphs and charts in the reports.

Candidates chose manageable issues such as school cafeteria, sole trader, partnership... and cleverly integrated the economic theories and concepts.

Some areas in which there is room for improvement include the following:

- Some candidates should use empirical data to greater support the theories and concepts they discuss. The data should be used in calculations, for example, elasticities and in constructing diagrams.
- There has been a significant improvement in communication, but some candidates are still making too many grammatical errors which detract from the work.
- Some candidates are collecting more information but are not logically integrating them in the projects. Tables and diagrams are not properly described and analysed.
- Teachers should emphasise higher level competencies such as synthesis and evaluation.
- Many candidates are guilty of plagiarism. Teachers are encouraged to get them to desist in this area by informing them of the penalty for plagiarism.

With greater teacher guidance the quality of the internal assessment should continue to improve.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION  
MAY/JUNE 2008**

**ECONOMICS  
(REGION EXCLUDING TRINIDAD AND TOBAGO)**

**ECONOMICS****CARIBBEAN ADVANCED PROFICIENCY EXAMINATION****MAY - JUNE 2008****GENERAL COMMENTS**

The candidates' overall performance this year was good though it could have been much better, attaining a higher level of excellence. Candidates' performance on Unit 1 was better than their performance on Unit 2. The syllabus provided an adequate degree of challenge to the candidates, notwithstanding, many of them performed creditably.

**UNIT 1****PAPER 01**

This overall performance in Unit 1, microeconomics, was satisfactory although parts of the syllabus provided great challenges for the candidates. Paper 01 consisted of 45 multiple choice questions, each worth 2 marks. There were three modules, each consisting of 15 questions.

**PAPER 01****MULTIPLE CHOICE QUESTIONS****MODULE 1**

This module tested candidates' understanding of the fundamental concepts of economics such as scarcity, choice, opportunity cost, efficiency, the market, demand, supply and equilibrium, and their ability to apply them. Performance on this module was very good.

**MODULE 2**

This module tested candidates' ability to analyse the efficiency with which the market system allocates scarce resources and required candidates to demonstrate understanding of the concepts such as market structure and market failure. Performance in this module was good.

**MODULE 3**

This module required understanding of the markets for productive resources and included a number of popular issues such as the functional and size distribution of income, inequality and poverty. Performance in the module was satisfactory.

## **GENERAL COMMENTS**

### **PAPER 02**

#### **ESSAYS**

Paper 02 required candidates to employ higher-level competencies; analysing economic issues, applying economic theories in solving problems and evaluating economics policies and programmes.

Candidates were given opportunities to choose one of two questions in each of the three modules. Each question was worth 50 marks.

### **MODULE 1**

Module 1 dealt with fundamental economic concepts; scarcity, choice, opportunity cost and production possibilities curves, as well as the factors that influence demand, supply and elasticity of demand.

#### Question 1

Candidates were required to (a) demonstrate their knowledge and understanding of fundamental ideas in microeconomics. This was a popular question attempted by 70 per cent of the candidates. The parts of the question that presented the greatest challenge to the candidates were; d (i) requiring that candidates discuss the assumptions under which the PPF is drawn; d (ii) requiring candidates to explain that improvement of the production technology for food, one of the commodities, would cause the PPF to pivot outward at the axis on which the other commodity, capital goods, is measured, e (i) requiring candidates to calculate opportunity cost of increasing food production from 3 to 4; e (ii) requiring explanation of the main factor responsible for the increasing cost of food production; e (iii) dealing with the specialization of resources.

#### Question 2

This question required candidates to demonstrate knowledge and understanding of the factors that influence demand, supply and the elasticity of demand for commodities. About 30 per cent of the candidates answered this question. Many candidates performed satisfactorily on the question although some parts of the question were very challenging. In answering d (i) many candidates could not write the formula for cross-elasticity of demand and calculate the cross-elasticity coefficient. For e (i) candidates could not supply and explain three determinants of the elasticity of demand, for example, the number and closeness of substitutes. Rather, they discussed factors that influence demand. Candidates found (f) very challenging and could not explain the effect of time on elasticity. The other parts were well done.

### **MODULE 2**

This module required the ability to compare three main types of market structures; perfect competition, monopoly and monopolistic competition and to analyse their effects on economic and normal profits and efficient resource allocation. Candidates were required to explain the causes of market failure and their effects on private and social costs and benefits and to evaluate the effectiveness of taxation, subsidies and legislation as corrective measures for the causes of market.

### Question 3

This question required that candidates define market structure and identify, compare and contrast three major types of market structures. They were also required to list four barriers that protect monopolies and differentiate between normal and economic profits. Candidates' skills in constructing diagrams representing various market structures were also tested. Many candidates' performance in this question was good. They showed a reasonable amount of understanding and ability comparing and contrasting market structures.

The weakest response was in representing on a diagram a firm in monopolistic competition making economic profit. Generally axes, cost and revenue curves were not drawn and labeled correctly and many candidates did not shade the rectangle representing economic profit. Some candidates also could not explain why economic profits would decline to zero and the number of firms would increase in the long-run.

### Question 4

This question required candidates to demonstrate knowledge and understanding of the causes of market failure, in particular, public goods and externalities, both positive and negative. Candidates were required to explain how the free-rider problem resulted in market failure and the effects of externalities on costs and benefits. They were also required to explain how government could use taxation, subsidies and legislation to deal with the problems caused by externalities.

Most candidates could say what market failure, social benefit and Pareto Efficiency meant but some could not state the two key characteristics of public goods or why the free rider problem leads to market failure. Most candidates were acquainted with the idea of externalities and could explain their effects on costs and benefits, but not on output of goods and services. Many candidates found it a challenge to identify and explain other major causes of market failure, but did well explaining how government could use taxation, subsidies and legislation to deal with the adverse effects of externalities.

## **MODULE 3**

Module 3 required understanding of the production function and the ability to employ distribution theory to analyse and evaluate issues surrounding the combining of factors of production and the size and functional distribution of income. It also required knowledge and understanding of concepts and issues associated with income distribution, the measurement of inequality and factors that contribute to social welfare and poverty such as health, education and unemployment.

### Question 5

Candidates were required to demonstrate knowledge and understanding of the factors of production and rewards earned by their owners. Candidates were also required to calculate the marginal product of labour and its values and draw labour demand and labour supply curves. Candidates were also required to analyse the effects of the CSME on migration and wages in CARICOM member states.

Many candidates performed well on the factors of production and the reward going to their owners, but many could not draw the labour demand and labour supply curves correctly, or explain the relationship between the value of the marginal product of labour curve and the demand curve for labour, or explain the idea of "derived demand." Candidates were severely challenged to calculate the labour force and the labour participation rate from data supplied. Some candidates could not explain that wages would rise in CSME states losing workers and fall in CSME states receiving workers.

### Question 6

This question required candidates to (i) distinguish between the functional and the size distribution of income; (ii) describe the Lorenz curve and distinguish between absolute and relative poverty, (iii) explain how health, education and unemployment affect poverty (iv) explain the terms ‘welfare programme’, ‘moral hazard’ and ‘adverse selection.’

Candidates’ performance on this question was satisfactory. Many candidates were not prepared to give a clear distinction between absolute and relative poverty. Most candidates exhibited good knowledge of the Lorenz curve, but many could not say how the Gini coefficient was derived from it. Candidates performed below expectation in their explanation of the relationship between each of health, education and unemployment and poverty. Most candidates did well explaining moral hazard and adverse selection.

## **GENERAL COMMENTS**

### **UNIT 2**

Unit 2 dealt with macroeconomic theories, concepts and issues. Many of the candidates demonstrated a good grasp of the subject matter. Overall the responses were good.

### **PAPER 01**

#### **MULTIPLE CHOICE**

This paper comprised 45 questions, divided into 15 questions per module. Each question was worth 2 marks. Performance on the paper was good.

#### **MODULE 1**

This module required candidates to demonstrate a good understanding of (a) national income accounting, (b) the components of aggregate demand (expenditure) (c) the classical and Keynesian economic models and (d) national income equilibrium, recessionary and inflationary gaps.

#### **MODULE 2**

Module 2 covered the nature of money, its measurement, money demand and supply, the role of the central bank, monetary and fiscal policy, servicing the national debt and the quantity theory.

#### **MODULE 3**

This module dealt with foreign trade and commercial policy, the terms of trade, the balance of payments, the foreign exchange market, regional integration, Globalization and foreign direct investment.

**PAPER 02****ESSAYS**

This paper consisted of 6 questions, two per module. Candidates were required to answer one of two questions on each of the modules.

**MODULE 1**

This module dealt with Classical and Keynesian views of inflation and unemployment, interest rates, the accelerator hypothesis and the difference between the marginal efficiency of capital (MEC) and the marginal efficiency of investment (MEI). The module also dealt with key aspects of consumption functions.

**Question 1**

This question required knowledge of inflation, its causes and measurement, the rate of unemployment and the types of unemployment, inflation rates, the accelerator hypothesis, the MEC and the MEI.

The overall response to this question was fair. Candidates understood the causes of inflation and knew the types of unemployment, while many could distinguish between real and nominal interest rates. Some, however, could not distinguish between the Keynesian and Classical views. Many found the concepts of the accelerator, the MEC and the MEI very challenging and teachers would have to spend more time ensuring that these ideas are better grasped by candidates.

**Question 2**

Overall the candidates performed well on this question. Most candidates could draw the diagram showing the consumption function and define the propensities to consume and save. Candidates also gave a good exposition of the influences on consumption and savings, the permanent income hypothesis and the life cycle hypothesis.

**MODULE 2**

This module dealt with money, interest rate and monetary policy. It also dealt with fiscal policy, the relative potency of monetary and fiscal policy, budget deficits and the national debt.

**Question 3**

This question required knowledge and understanding of the equation of exchange, and how this equation could be used to explain the power of expansionary monetary policy to cause inflation and the effect of inflation on the major functions of money. Candidates were also required to explain the demand for money.

Many candidates were able to distinguish between M1 and M2, define the “velocity of money,” explain how monetary expansion can result in inflation and the effects of inflation on the functions of money. Some candidates were unacquainted with currency substitution, and some could not explain the positive relationship between the speculative demand for money and the direct relationship between money demand and income. Overall performance on the question was good.

#### Question 4

This question required the drawing of diagrams explaining how interest was determined in the Keynesian model and the relationship between investment and the interest rate. Candidates were also required to explain factors affecting the potency of monetary policy, fiscal policy, the balanced budget multiplier, automatic stabilisers, national debt and the debt service ratio. Candidates were also required to say how a budget deficit could be financed without raising taxes. This question proved challenging for many candidates. Many candidates found representing graphically, the determination of the interest rate and the relationship between investment and interest rate challenging. Most candidates could explain the meaning of lags in monetary policy but many could not give a plausible explanation of the effect of lags on the potency of monetary policy. Many candidates wrote weak responses to the national debt and debt service ratio and could not come up with four ways of financing a budget deficit. Overall performance on this question was good.

### **MODULE 3**

Module three dealt with foreign direct investment (FDI), the balance of payments, economic growth and development.

#### Question 5

This question required knowledge and understanding of the advantages and disadvantages of FDI and the difference between the current and capital accounts. Candidates were also required to show understanding of the causes of balance of payments. Many, however, could not clearly distinguish between the current account and capital account transactions. While many candidates did well on potential causes of balance of payments and approaches to solving them, some performed weakly on this part of the question. Performance on this question was fair.

#### Question 6

This question required knowledge and understanding of economic growth and development, the determinants and the benefits of growth. Candidates were also required to outline four basic indicators of development, explain how each is measured and discuss the difference between growth and development. Candidates were able to distinguish between growth and development, explain three factors that determine economic growth and explain two benefits of growth. Most candidates were able to outline four indicators of development, but found explaining how each was measured challenging. Overall performance on the question was good.

### **RECOMMENDATIONS TO TEACHERS**

Teachers have made great strides in preparing candidates for the Caribbean Advanced Proficiency Examination (CAPE) in economics as is evidenced in many excellent answers. Some candidates were not fully acquainted with some fundamental concepts and there were some areas in which candidates lacked the ability required to answer some questions accurately even though they had a good grasp of the basic concepts. Higher level competencies involving application, analysis, synthesis and evaluation required for excellent performance were lacking in many of the candidates.

Students should be provided with repeated opportunities to practice new concepts; such as drawing and interpreting diagrams, calculating the slopes of lines, elasticity coefficients, multipliers, percentage changes. The diagram of the market demand and supply and equilibrium price and quantity are fundamental economic concepts and should be fully understood by candidates. Teachers should insist on proper labeling of axes and curves, since candidates are awarded marks for neat and accurate diagrams.

### **INTERNAL ASSESSMENT (IA)**

Candidates performed well on the Internal Assessment (IA) component of the examination, reflecting close teacher supervision of many candidates' projects. The synergies among Papers 1 and 2 and the IA were exploited fully to the advantage of the candidates.

The marks allotted by teachers were generally fair and were more or less consistent with moderators' marks, though in some cases there were sizable disparities.

There is however room for improvement in some areas including the following:

- Candidates should make use of empirical data in supporting their findings. The data presented must be relevant and must be discussed. Data not discussed should not be included in the report.
- There has been a significant improvement in communication with a reduction in spelling and grammatical errors which often detract from the work.
- Candidates continue to perform below expectations in the higher level competencies such as analysis, synthesis and evaluation. Teachers should re-emphasise these skills.
- Many candidates are guilty of not giving credit to all of their secondary sources. Teachers can assist them in this area.
- Candidates should be encouraged to include in their report their primary data collection.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION  
MAY/JUNE 2009**

**ECONOMICS**

## **ECONOMICS**

### **CARIBBEAN ADVANCED PROFICIENCY EXAMINATION**

**MAY/JUNE 2009**

#### **GENERAL COMMENTS**

The CAPE Economics Examination consists of two units each examined by three papers.

Paper 01 – Multiple Choice

Paper 02 – Essay

Paper 03 – The Internal Assessment (IA) done by school candidates and the Alternative to the IA done by private candidates.

#### **DETAILED COMMENTS**

##### **UNIT 1**

Unit 1 dealt with microeconomics theories, concepts and issues. Performance in Unit 1 was satisfactory. The mean was 48 per cent. Unit 1 is divided into three modules.

**Module 1 – Methodology of Economics and Demand and Supply Analysis**

This module tested candidates' understanding of the fundamental concepts of Economics such as scarcity, choice, opportunity cost, efficiency, the market, demand, supply and equilibrium, and their ability to apply them. The mean was 49 out of 100.

**Module 2 – Market Structure and Market Failure**

This module tested candidates' ability to analyse the efficiency with which the market system allocates scarce resources, and required candidates to demonstrate understanding of the concepts such as market structure and market failure. The mean was 51 out of 100.

**Module 3 – Distribution Theory and Applications of Recent Theoretical Development**

This module required an understanding of the markets for productive resources as well as a number of popular issues, such as size and functional distribution of income, inequality and poverty. The mean was 49 out of 100.

#### **Paper 01**

Paper 01 consisted of 45 multiple choice items spanning knowledge and comprehension, application and interpretation of information. The mean on Paper 01 was 58 per cent.

#### **Paper 02**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues; apply economic theories in solving problems, and evaluate economic policies and programmes.

Candidates were given the opportunity to choose one of two questions in each of the three modules. Each question was worth 50 marks. The mean for Paper 02 was 38 per cent.

### Question 1

This question required candidates to:

- Explain how the market allocates scarce resources using a properly labelled diagram of the market.
- Demonstrate knowledge of equilibrium and disequilibrium.
- Explain the concept ‘price floors’ and give the advantages and disadvantages of price floors.

Question 1 was attempted by 29 per cent of the candidates, 86 per cent of whom performed at an acceptable level. It was apparent that many candidates were not accustomed to drawing the demand diagram and paying attention to details such as correct labeling of axes and curves. Candidates were also severely challenged to distinguish between price ceiling and price floor, and to discuss the advantages and disadvantages of an effective price floor. The mean for the Question 1 was 19 out of 50.

### Question 2

Candidates were required to:

- Demonstrate knowledge and understanding of supply curves.
- Explain the shape of the short-run and long-run supply curves positive slopes.
- Distinguish between those factors that cause supply curves to shift and those causing them to change their slopes.

This was the more popular of the two questions in Module 1. Approximately 71 per cent of the candidates attempted this question, 61 per cent of whom provided acceptable responses. Most candidates listed the factors that determined the features of the supply curve, but could not explain how and why the factors influenced the supply curves. The mean for the Question was 18 out of 50.

### Question 3

Candidates were required to:

- Identify the four major market structures.
- Identify the most efficient market structure and its characteristics.
- Compare the characteristics of monopolistic competition with perfect competition.
- Compare these market structures in terms of output, price and profit in the short and long run.

This question was more popular than question 4. It was attempted by 62 per cent of the candidates, of whom 86 per cent performed satisfactorily. However, some candidates did not correctly identify the most efficient market structure, hence, making the comparisons proved challenging. The mean for Question 3 was 24 out of 50.

#### Question 4

Candidates were required to:

- Demonstrate knowledge and understanding of the difference between pairs of concepts such as private cost and social cost, merit and public goods; positive and negative externality, and adverse selection and moral hazard.
- Explain how market failure was caused by public goods, externalities and moral hazards.
- Explain how governments can solve the market failure caused by public goods.

This question was attempted by 35 per cent of the candidates, 77 per cent of whom provided acceptable responses. Many candidates were not knowledgeable of the concepts and therefore found it very challenging. The mean for Question 4 was 17 out of 50.

#### Question 5

Candidates were required to:

- Demonstrate knowledge and understanding of the formulae applied in the calculation of the marginal and average products of labour as well as the value of the marginal product.
- Use the information supplied to draw and interpret diagrams, and analyse the effect of trade union activity on wages and employment.

This question was attempted by 32 per cent of the candidates, 80 per cent of whom provided acceptable responses. Many candidates demonstrated very good knowledge and understanding of the methods used to calculate marginal values, but some found the drawing of the diagrams, their interpretation, and the analysis of the effect of trade unions on the labour market challenging. Performance on this question was generally good. The mean for Question 5 was 23 out of 50.

#### Question 6

Candidates were required to:

- Distinguish between the terms ‘absolute poverty’ and ‘relative poverty’ and to explain and critique the basic needs approach, the poverty line approach, and the UNDP’S Human Development Index approach to measuring poverty.

This question was attempted by 68 per cent of the candidates, 68 per cent of whom provided acceptable responses. Many candidates were not sufficiently knowledgeable to give a clear distinction between absolute and relative poverty. A major challenge was the meaning of “relative poverty”, but most candidates demonstrated adequate knowledge of absolute poverty. Many candidates were greatly challenged by the concepts and, in particular, the explanations and critiques. Candidates’ performance on this question was satisfactory. The mean for Question 6 was 14 out of 50.

## UNIT 2

Unit 2 dealt with macroeconomic theories, concepts and issues. The mean was 53 per cent. Unit 2 is divided into three modules.

### **Module 1 – Models of the Macroeconomy**

This module required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts: national income accounting, using the income approach and the expenditure approach and examine GDP per capita as a measure of standard of living; as well as explain the Keynesian Consumption Function, and the factors that cause it to shift and its slope.

### **Module 2 – Macroeconomic Policy Analysis**

Module 2 dealt with the nature of money, the measurement of and the demand and supply of money, as well as the monetary transmission mechanism; the role of the Central Bank in the control of inflation; the Keynesian liquidity preference framework and the potency of monetary policy in the CARICOM member states. The module also dealt with fiscal policy; the effect of balanced budgets on income, the effects of fiscal deficits on selected economic variables, the investment function and the burden of the national debt.

### **Module 3 – Growth, Development and International Economic Relations**

This module dealt with the determinants of growth and development, the components of the HDI, the costs of growth and the impediments to growth faced by Caribbean countries. The module also dealt with foreign trade and commercial policy; the determinants of exports, the advantages of different exchange rate regimes and the consequences of devaluation.

### **Paper 01**

Paper 01 consisted of 45 multiple choice items spanning knowledge and comprehension, application and interpretation of information. The mean of Paper 01 was 63 per cent.

### **Paper 02**

This paper consisted of 6 questions, two per module. Candidates were required to answer one of two questions on each of the modules.

#### **Question 1**

Candidates were required to:

- Demonstrate knowledge of major macroeconomic terms and how they are measured.
- Calculate the Gross Domestic Product (GDP) using both the income approach and the expenditure approach
- Explain the limitations of the GDP as an indicator of a country's standard of living.

This question was attempted by 76 per cent of the candidates, 90 per cent of whom provided acceptable responses. Overall the response to this question was good. Candidates answered most parts of this question well. They were, however, severely challenged when asked to explain the limitations of GDP as an indicator of national well-being. The mean was 27 out of 50.

### Question 2

Candidates were required to:

- Demonstrate an understanding of some of the details of the Keynesian Consumption
  - The Average Propensity to Consume (APC)
  - Marginal Propensity to Consume (MPC)
  - Autonomous Consumption
- Represent the consumption function graphically.
- Explain the determinants of the consumption function.

Question 2 was attempted by 24 per cent of the candidates, 69 per cent of whom provided acceptable responses. Many candidates however were unfamiliar with details required to explain the effect of a rise in income on the APC and the MPC. Overall the candidates performed fairly well on this question. Most candidates were able to draw the diagram of the consumption, show knowledge of the calculation of the APC and MPC, and identify the autonomous part of consumption. The mean was 23 out of 50.

### Question 3

Candidates were required to:

- Demonstrate knowledge and understanding of the measures of money
  - Monetary transmission mechanism
  - Reasons for handling money
  - The velocity of money
  - Tools of monetary policy used in the region to control inflation
- Explain the Keynesian liquidity preference theory
- Explain the effect of monetary policy on interest rates and money demand, and the impotence of monetary policy

This question was attempted by 55 per cent of the candidates, 77 per cent of whom achieved acceptable grades.

The majority of candidates were able to define terms, but were challenged by the theories and their explanation and application. The Diagrams were poorly drawn and were therefore of little use. Performance on this question was fair. The mean was 21 out of 50.

### Question 4

This question required candidates to:

- Demonstrate an understanding of fiscal policy; the budget, government spending and tax revenues, budget deficits and the national debt.
- Explain how government borrowing can have a negative effect on interest rates, investment, inflation and the exchange rate.

- Explain, using a diagram, the relationship between investment and the interest rate, also how expansionary fiscal policy can affect investment negatively
- Explain the national debt and why it is a burden to a country.

This question was attempted by 45 per cent of the candidates, 70 per cent of whom provided acceptable responses.

Many candidates demonstrated knowledge of balanced and unbalanced budgets, but could not explain why a balanced budget is expansionary. Some candidates confused balanced budget with the balance of payments and wrote about imports and exports. Many candidates were most seriously challenged in explaining the negative effects of government deficits and expansionary fiscal policy, but gave good reasons why the national debt may be a burden. Performance on this question was fair. The mean was 16 out of 50.

#### Question 5

Candidates were required to:

- Demonstrate knowledge and understanding of the concepts, “economic growth” and “development.”
- Explain the terms, ‘economic development,’ the ‘human development index,’
- Discuss the costs of, and impediments to economic growth of Caribbean economies.

This question was attempted by 58 per cent of the candidates, 75 per cent of whom provided acceptable responses.

Candidates demonstrated good knowledge of the determinants of growth, but their responses to the description of development were somewhat vague. Their explanation of the human development index (HDI) was good, but many could not give the three components of the HDI. Candidates misinterpreted the term “costs of economic growth” to mean value of economic growth. Most candidates gave a good discussion of the impediments to economic growth faced by Caribbean economies. Performance on this question was fair. The mean was 21 out of 50.

#### Question 6:

Candidates were required to:

- Demonstrate knowledge and understanding of:
  - Barriers to trade
  - The determinants of a country’s export earnings
  - The types and benefits of exchange rates
  - The consequences of devaluation

This question was attempted by 42 per cent of the candidates, 83 per cent of whom provided acceptable responses.

Most candidates demonstrated knowledge of tariffs and quotas, but were unfamiliar with the term, ‘non-tariff barriers’ (an example of which is quotas). Candidates also performed well on questions that dealt with the determinants of export earnings, the consequences of devaluation, as well as on the

types of exchange rates and their benefits. Performance on this question was good. The mean was 22 out of 50.

### **Recommendation To Teachers**

Teachers of economics are quite aware that economics is a very logical subject and that the more meticulous the approach the teacher adopts to teaching it the better the results will be. Paying attention to details is the key to better results. This approach brings out the best in the students as it teaches them to think logically and coherently and reduces mediocrity.

Overall performance at this years' examination was fair but could have been much better. Some candidates however were not fully acquainted with some fundamental concepts, and there were some areas in which candidates lacked the ability required to answer some questions accurately, even though they had a good grasp of the basic concepts. Higher level competencies involving application, analysis, synthesis and evaluation required for excellent performance were lacking in many of the candidates.

It is no secret that teachers and indeed the candidates face several challenges preparing for CAPE examinations, time being high up on the list of challenges. Time management then becomes a priority. It is worth repeating that teachers should aim at improved preparation of the candidates by ensuring that they are familiar with the totality of the syllabus. This would ensure that candidates have the best chance of obtaining a good grade in the subject. Classroom instructions, which do not include take home assignments and self-study, should be no fewer than three hours per week for 39 weeks. Students should be made aware of the demands of the course of study at the first scheduled class meeting at which the programme for the entire course, including IA, is outlined. Serious work should begin on the first day of class. Teachers will find that it is a good investment to spend much of the first few weeks of the class on the quantitative techniques, graphs and tables.

Students should be taught to draw and interpret diagrams, and to calculate and interpret the slopes of lines, elasticity coefficients, multipliers, percentage and changes. The Marshallian Cross, the diagram of the market; demand, supply, equilibrium price and quantity should be fully understood by candidates, as should be the Keynesian Cross illustrating the determination of national income equilibrium. Students should practice these skills under the supervision of the teacher as well as on their own time. Teachers should insist on proper labeling of axes and curves since this is conducive to learning and candidates are awarded marks for neat and accurate diagrams. Teachers should ensure that students are exposed to adequate assignments targeting some of the challenging areas of the syllabus.

### **Paper 03/1 - Internal Assessment (IA)**

Candidates performed well on the Internal Assessment (IA) component of the examination, reflecting close teacher supervision of many candidates' projects. The synergies among Papers 01 and 02 and the IA were exploited fully to the advantage of the candidates. Eighty-five per cent of the candidates achieved acceptable grades in both units. The mean for Unit 1 was 65 per cent. The mean for Unit 2 was 66 per cent. The marks awarded by teachers were generally fair and were more or less consistent with moderators' marks, though in cases there were wide discrepancies.

There is, however, room for improvement in some areas including the following:

- Students need to use empirical data to support their findings. The data presented must be relevant to the topic, must be analysed, and the results used to support conclusions. Data not analysed and discussed should not be included in the report. Students must also adhere to the word limit placed on the project.

- There has been a significant improvement in communication with a reduction in spelling and grammatical errors which often detract from the work. There remain, however, many errors, most of which could be eliminated by using the tools provided by the software.
- Students continue to perform below expectations in the higher level competencies such as analysis, synthesis and evaluation. Teachers should provide opportunities for students to engage in higher order thinking skills.
- Many candidates are guilty of not giving credit to all of their secondary sources. Teachers need to impress upon students to cite sources in the body of the project and to give full citation in the bibliography. Teachers must remain vigilant and ensure that the work presented is the candidate's own. Teachers should approve the project and the outline and follow the progress of the candidate over the duration of the project.

With greater teacher guidance the IAs should continue to improve.

### **Paper 03/2 - The Alternative To The Internal Assessment**

Paper 03/2 consisted of three questions, one on each module. Candidates were required to research a given topic in preparation for the examination. Paper 03/2 attempts to simulate the skills assessed in the Internal Assessment.

#### **UNIT 1**

Thirty-six candidates wrote Paper 03/2. The theme of this examination was “The impact of market structure on the economy”. The mean was 35 per cent. Candidates did not perform well on Questions 2 and 3. Their main challenge was in the application and analysis of information.

#### **UNIT 2**

One hundred and twenty candidates wrote Paper 03/2. The theme of this examination was “The impact of global recession on your country”. The mean was 40 per cent. Candidates seemed unfamiliar with the concept ‘balance of payment’. Hence, they were unable to outline the relationship between global recession and balance of payments.

### **Recommendations**

In order for candidates registering for Paper 03/2 to perform well, they need to research the topic thoroughly and be prepared to discuss the issues relating to the topic.

Candidates need to follow a structured programme offered by a recognized institution and taught by certified persons.

Candidates also need to familiarize themselves with the requirements of the syllabus.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
ADVANCED PROFICIENCY EXAMINATION  
MAY/JUNE 2010**

**ECONOMICS**

## **GENERAL COMMENTS**

The CAPE Economics Examination consists of two units — each examined by the following papers.

- Paper 01 – Multiple Choice
- Paper 02 – Essay
- Paper 03/1 – The Internal Assessment (IA) (done by school candidates)
- Paper 03/2 – Alternative to IA (done by private candidates)

The overall performance of candidates in the examination was satisfactory for both Units 1 and 2. Performance on Unit 1 improved significantly over 2009 and now parallels Unit 2. Performance on Unit 2 remains stable and consistent with that of 2009.

## **DETAILED COMMENTS**

### **UNIT 1**

Unit 1 dealt with microeconomics theories, concepts and issues. Performance in Unit 1 was satisfactory. The mean mark was 55 per cent.

Unit 1 is divided into three modules:

- Module 1 – Methodology of Economics and Demand and Supply Analysis
- Module 2 – Market Structure and Market Failure
- Module 3 – Distribution Theory and Applications of Recent Theoretical Development

#### **Module 1 – Methodology of Economics and Demand and Supply Analysis**

This module tested candidates' understanding of the fundamental concepts of economics — scarcity, choice, opportunity cost, the production possibilities frontier (PPF), pareto efficiency criteria, the market, demand, supply, equilibrium, price floors and price ceilings, utility maximization, optimal output, normal profit and economic profit — and candidates' ability to apply these concepts to economic problems. Performance on this module was very good. The mean mark was 61 out of 100.

#### **Module 2 – Market Structure and Market Failure**

This module tested candidates' ability to analyse the efficiency with which the market system allocates scarce resources and to demonstrate understanding of economic concepts such as market structure, market failure, the characteristics that distinguish the four main market structures, perfect competition, monopolistic competition, oligopoly and monopoly, two measures of market power and the causes of market failure and government intervention in the market. Performance in this module was satisfactory. The mean mark was 49 out of 100.

#### **Module 3 – Distribution Theory and Applications of Recent Theoretical Development**

This module required an understanding of the markets for productive resources. It dealt with a number of popular issues. The topics dealt with included the equi-marginal principle (with which some candidates did not show great familiarity), information asymmetry, the labour force, the

marginal revenue product (MRP) and the demand for labour, factor mobility in the CSME, the determination of factor prices, rent and transfer earnings, the functional and size distribution of income, inequality and poverty. Performance in the module was satisfactory. The mean mark was 56 out of 100.

### **Paper 01 – Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension, application and interpretation of information. The mean mark on Paper 01 was 62 per cent.

### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programmes. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks.

#### **Question 1**

This question was attempted by approximately 25 per cent of the candidates. Part (a) of the question required candidates to explain key utility concepts with the use of examples. Part (b) required them to calculate marginal utility and marginal utility per dollar for two goods and to apply the concept of consumer optimality. Approximately 88 per cent of the candidates who attempted this question performed at an acceptable level, with 65 per cent of them earning at least 14 out of a possible 25 marks.

Most candidates were able to define the key terms and perform the calculations. However, some candidates were challenged by the application of concept and in providing suitable examples. While candidates generally identified the combination of bread and buns that would maximize consumer satisfaction, many of them did not explain how they arrived at their answer. The mean mark was 15.91 out of 25.

#### **Question 2**

This was the more popular of the two questions in Module 1. Approximately 75 per cent of the candidates attempted this question, 77 per cent of whom received satisfactory marks.

Candidates were required, in Part (a) of the question, to demonstrate knowledge and understanding of demand and the law of demand as well as to explain how a change in demand differs from a change in the quantity demanded. In Part (b), candidates were required to identify three factors, other than the price of beef, and to discuss why each of the three factors identified influence the demand for beef.

Many candidates did not demonstrate a comprehensive grasp of the definition of demand or the law of demand. They were generally unable to explain why consumer demand changes when the conditions of demand change. Distinguishing between a change in demand and a change in the quantity demanded proved to be challenging for many candidates. The mean mark for this question was 14.2 out of 25.

### Question 3

Part (a) required candidates to demonstrate knowledge and understanding of monopolistic competition and oligopoly and to assess the role of advertising in monopolistic competition. Part (b) required them to give a diagrammatic exposition of the short-run and long-run output, pricing and profits of a firm in monopolistic competition. Approximately 45 per cent of candidates attempted this question, with approximately 68 per cent of them performing satisfactorily. Some candidates could not satisfactorily show the similarities and differences between the two market structures, while many were challenged in assessing the role of advertising. Some candidates demonstrated a superficial knowledge of monopolistic competition and could not give satisfactory responses to Part (b). The mean mark was 12.84 out of 45.

### Question 4

This question was by far the most challenging of the entire examination. It was attempted by approximately 55 per cent of the candidates with 77 per cent of them receiving satisfactory scores.

In Part (a) of the question, candidates were required to demonstrate knowledge and understanding of the term ‘market failure’ using the pareto efficiency criterion and to explain how public goods and monopolies cause market failure. In Part (b), they were required to assess governments’ response to market failure.

Many candidates demonstrated knowledge of market failure, but were unable to explain what causes it. The mean mark was 8.39 out of 25.

### Question 5

This question was attempted by approximately 79 per cent of the candidates, with 70 per cent of them receiving satisfactory scores. In Part (a), candidates were required to calculate the marginal product of labour and the value of the marginal product of labour. In Part (b), they were required to draw a diagram showing the value of the marginal product of labour curve, with the line showing the wage superimposed on the same diagram.

Candidates were able to perform the required calculations, draw the diagram and select the correct number of workers to be employed, but they were unable to explain how they arrived at their conclusions. The mean mark for this question was 13.89 out of 25.

### Question 6

This question was attempted by approximately 21 per cent of the candidates, with 68 per cent of them gaining satisfactory scores. Part (a) of the question required candidates to use a demand and supply diagram to explain the determination of wage rate and employment levels by the market. Part (b) required them to explain the role of institutional factors in the determination of wage rates. Many candidates did not draw the diagram carefully and could not explain it properly, nor could they explain how to arrive at the wage rates. Many candidates, however, were able to explain the role of government and trade unions, but not the employers’ association, in the determination of wages. Performance on the question was fair. The mean mark was 9.54 out of 25

## UNIT 2

Unit 2 dealt with macroeconomic theories, concepts and issues. Many of the candidates demonstrated a good grasp of the subject matter. Overall, the responses were good. The mean for Unit 2 was 54 per cent.

### **Paper 01 – Multiple Choice**

#### **Module 1**

This module required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts, national income accounting, the Keynesian consumption function, the determinants of money demand, real interest rates, the labour supply and labour demand, the natural level of unemployment and real and nominal gross domestic product (GDP) at factor cost and market prices. Performance on the module was fair. The mean mark was 51 per cent of the maximum score.

#### **Module 2**

Module 2 covered monetary and fiscal policy: money demand, money supply, the interest rate, the effects of changes in the interest rate, the role of the central bank, the Keynesian liquidity preference framework and motives for holding money. The module also dealt with discretionary fiscal policy and automatic stabilizers, deficits, surpluses, the national debt and the debt service ratio, unemployment and ‘crowding out’. Performance on the module was fair. The mean mark was 53 per cent.

#### **Module 3**

This module dealt with the determinants of growth, foreign trade and commercial policy, international organizations, multinational corporations, economic integration, globalization, the balance of payments accounts, the determination of exchange rates, the advantages and disadvantages of different exchange rate regimes. Performance on the module was fairly good. The mean mark was 58 per cent of the maximum score.

This paper comprised 45 items, 15 questions per module. The items spanned knowledge, comprehension and application. Performance on the paper was good. The mean was 63 per cent.

### **Paper 02 – Essays**

This paper consisted of six questions, two per module. Candidates were required to answer one of two questions on each of the modules. Each question was worth 25 marks.

#### **Question 1**

This question was attempted by approximately 57 per cent of the candidates, 77 per cent of whom performed satisfactorily. Part (a) of the question required candidates to demonstrate knowledge and understanding of national income accounts. They were required to explain the difference between nominal and real GDP and to discuss reasons why the GDP by itself was not a complete measure of economic welfare. In Part (b), candidates were required to determine features of a small model of the

economy and use the model to determine equilibrium GDP. In Part (c), they were required to describe the net national product and personal disposable income and state how they are measured.

Overall, the responses to this question were good. Candidates demonstrated adequate knowledge of the limitations of GDP as an indicator of economic welfare. However, they were challenged in defining net national product and personal disposable income, distinguishing between nominal and real GDP, calculating national income equilibrium and the open economy multiplier. The mean mark for this question was 11.18 out of 25.

#### Question 2

This question was attempted by approximately 43 per cent of the candidates, 69 per cent of whom scored at least 50 per cent of the maximum available marks. The question required knowledge and understanding of the Classical and Keynesian models. In Part (a), candidates were required to explain the difference between the ‘recessionary gap’ and the ‘inflationary gap’, and to explain disequilibrium employment from the point of view of the Classical economists. In Part (b), candidates were required to define investment and describe four factors that influence investment. Most candidates were able to distinguish between the gaps using the Keynesian 45 degree line. They were also able to define investment, but many were challenged to explain disequilibrium unemployment and to describe the factors influencing investment. The explanations were not thoughtful and precise, but rather loose and superficial. Performance on the question was fair. The mean mark was 10.43 out of 25.

#### Question 3

This question was attempted by approximately 76 per cent of the candidates, 77 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) of the question required candidates to define money and outline the functions of money. Part (b) required them to explain what is meant by ‘a fractional reserve banking system’. In Part (c), candidates were required to explain the effects of various transactions on the transactions demand for money and equilibrium interest rate.

The majority of candidates were able to define money and outline the functions but some confused the functions of money with the motives for holding money. Candidates were generally challenged to explain the effects that changes in the pay period, changes in the nominal GDP and changes in the number of ATMs would have on the transactions demand for money and the interest rate. Overall performance on the question was good. The mean was 11.92 out of 25.

#### Question 4

This question was attempted by approximately 24 per cent of the candidates, 70 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to explain what was meant by ‘automatic stabilizers’ and ‘fiscal policy’. Candidates were also required to outline fiscal policy measures that would increase employment and output in Caribbean economies. In Part (b), candidates were required to discuss the limitations of fiscal policy measures.

Many candidates demonstrated knowledge of automatic stabilizers. The majority of them were able to explain ‘fiscal policy’ and identify appropriate fiscal measures but were unable to explain how the measures would expand employment and output. They were particularly challenged by Part (c).

Many candidates did not attempt a discussion of the limitations of fiscal policies. Those who did demonstrated limited knowledge of the concept. Performance on the question was fair. The mean mark was 12.05 out of 25.

#### Question 5

This question was attempted by approximately 68 per cent of the candidates, 75 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to identify three main stages of economic integration that CARICOM countries have attempted. In Part (b), they were required to state three benefits and three costs associated with economic integration. For Part (c), candidates were required to assess the pros and cons of foreign direct investments (FDIs) by multinational companies (MNCs) with regard to access to technology and job creation.

Candidates demonstrated good knowledge and understanding of the stages leading up to the formation of CARICOM, but they were unable to state three benefits and three costs associated with economic integration. The candidates demonstrated very good knowledge of the pros and cons of FDI by MNCs. Performance on the question was very good. The mean mark was 14.50 out of 25.

#### Question 6

This question was attempted by approximately 32 per cent of the candidates, 83 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to distinguish between ‘absolute advantage’ and ‘comparative advantage’. Part (b) required them to outline three arguments for and three arguments against the Economic Partnership Agreement (EPA) between the Caribbean and the European Union. In Part (c), candidates were required to outline two potential benefits of the EPA agreements. For Part (d), candidates were required to discuss two policy measures for correcting a trade deficit.

Distinguishing between ‘absolute advantage’ and ‘comparative advantage’ was very challenging for many candidates. They generally demonstrated little knowledge of the EPA between the Caribbean and the European Union. However, they were able to give reasonable responses to the potential benefits of the EPA. The responses to Part (d) were quite good. Candidates were able to give policy measures that could be implemented in order to correct a trade deficit. Candidates’ overall performance on the question was fair. The mean mark was 11.42 out of 25.

### **RECOMMENDATIONS TO TEACHERS**

The teaching and learning of economics can be very exciting as the subject matter deals with social reality, and economics is both a science and an art. As students are preparing for their examination and for life, many relevant events are occurring; new businesses are opening, new products are entering the market, firms are merging or are being taken over, some workers are losing their jobs while new workers are being employed, some prices are rising while others are falling or inflation is taking place. The little shop at the corner must compete with the large department store. There is no paucity of illustrations for teachers to use in their classes to make the subject relevant to the students and this is best done within frameworks or models. There are some basic principles which teachers should apply in preparing students for the examination.

- ❖ Students must pay attention to details. At the level of CAPE, for example, students need to go beyond the fact that if disposable income rises, consumption will also rise — the lay person knows that without reading an economics text. Students need to go into more depth, applying their knowledge of the marginal propensity to consume and the multiplier.
- ❖ There are some fundamental concepts and ideas which students must know, understand and be able to apply in solving economic problems: scarcity, opportunity cost, making of decisions at the margin, among others.
- ❖ Students must be encouraged to think logically and coherently for economics requires mathematically precise language.
- ❖ Diagrams must be drawn and labelled neatly using rulers; no shoddy, incomplete diagram should be presented.
- ❖ Students need to complete the entire syllabus in order to be adequately prepared for the examination.
- ❖ Students should be taught to draw and interpret diagrams and to calculate and interpret the slopes of lines, elasticity coefficients, multipliers, percentage changes, etc. The Marshallian Cross, the diagram of the market, demand, supply, equilibrium price and quantity need to be fully understood by students as should the Keynesian Cross and illustrating the determination of national income equilibrium.
- ❖ Students should practise diagram drawing and interpreting skills under the supervision of the teacher as well as on their own time. Teachers should insist on proper labelling of axes and curves since this is conducive to learning, and candidates are awarded marks for neat and accurate diagrams.
- ❖ Teachers should expose students to questions on traditionally challenging areas of the syllabus.

Overall performance on this year's examination was fair but fell short of expectations. The higher level competencies involving application, analysis, synthesis and evaluation required for excellent performance were again lacking in many of the candidates.

#### **Paper 03/2 – Alternative to Internal Assessment**

Paper 03/2 consisted of three questions, one on each module. Candidates were required to research a given theme in preparation for the examination. Paper 03/2 attempts to simulate the skills assessed in the internal assessment.

#### **UNIT 1**

The theme for Paper 03/2 for 2010 was “The role of education as a means of poverty alleviation”. Forty-four candidates wrote this paper. The mean mark was 27 out of 60.

### Question 1

Part (a) required candidates to list four types (levels) of education and training that are demanded in their country. In Part (b), candidates were required to explain why consumers demand the type of education and training that they do and for Part (c) they were required to discuss two costs, to consumers, of a good education.

Performance on this question was fair. Candidates were able to list the types of education. Most of them provided satisfactory responses to Part (b); however, describing the costs of education proved to be challenging for many candidates. The mean mark was 10.80 out of 20.

### Question 2

In Part (a), candidates were required to explain the concept of market failure with special emphasis on the efficiency criterion. Part (b) required them to discuss market failure in the context of the provision of education. For Part (c), candidates were required to explain how government can address the failure of the market to provide adequate education privately.

Candidates did not perform well on this question. Candidates seemed to lack knowledge with respect to market failure, hence they were unable to discuss the concept or explain how the problem could be addressed. The mean mark was 5.57 out of 20.

### Question 3

In Part (a), candidates were required to distinguish between ‘absolute poverty’ and ‘relative poverty’. Part (b) required them to explain the impact of education on income distribution, while Part (c) required them to assess the role of education in poverty alleviation.

Candidates did not perform well on this question. Many of them were challenged in distinguishing between ‘absolute poverty’ and ‘relative poverty’. The concept seemed not to be clearly understood, hence the distinction in many instances was not clear. Candidates were also challenged in Part (c) which required the application of higher-order thinking skills. The mean mark was 7.36 out of 20.

## **UNIT 2**

The theme for Paper 03/2 for 2010 was “Fiscal and monetary policies — Their relative effectiveness on employment, income and output”. Twenty-five candidates wrote this paper. The mean mark was 27 out of 60.

### Question 1

In Part (a), candidates were required to explain the meaning of fiscal and monetary policy. For Part (b), they were required to analyse two types of fiscal policies used in their country over the past five years. Part (c) required an analysis of the main type of monetary policy. In Part (d), candidates were required to evaluate two objectives of fiscal policies.

Performance on this question was fair. Candidates were mostly challenged by Parts (b) and (d). In Part (b), they merely stated fiscal policies rather than analyse them. Some candidates had difficulty

even stating the fiscal policies. In Part (d), they tended to outline the objectives rather than evaluate them. Very few candidates mentioned how effective or ineffective the objectives were. The mean mark for this question was 9.72 out of 20.

### Question 2

In Part (a), candidates were required to outline three costs of unemployment. For Part (b), they were required to explain how fiscal and monetary policies can be used to solve problems.

Performance on this question was satisfactory. Part (a) was fairly well done. However, some candidates struggled mainly with how fiscal policies can be used to solve problems. Candidates seemed to have just a superficial knowledge of the concept, hence they were challenged in going beyond defining, stating and outlining where these concepts were concerned. The mean mark for this question was 10.12 out of 20.

### Question 3

Part (a) required candidates to define ‘exchange rate’ and to state two ways in which the exchange rate is determined. Part (b) required them to examine two negative consequences of excessive government spending on a country’s exchange rate. In Part (c), they were required to assess two ways by which the central bank can use monetary policy to help stabilize the exchange rate.

From the responses given, many candidates did not seem to have a grounded knowledge with regard to the exchange rate. The definitions given were very imprecise. Assessing how the central bank can use monetary policy to stabilize the exchange rate proved to be very challenging for many candidates. While some candidates seemed to have some understanding of the central bank, they seemed to lack the ability to apply this knowledge to an actual or specific situation. The mean mark for this question was 7.16 out of 20.

## **RECOMMENDATIONS FOR PRIVATE CANDIDATES**

- In order for private candidates to perform well on Paper 03/2, it is imperative that they research the given theme thoroughly.
- Private candidates also need to pay close attention to budgetary issues in their country, as well as regionally and internationally, to get a better understanding of how governments run their countries.
- Private candidates need to make use of reports issued by the central banks, the International Monetary Fund and other financial bodies to familiarize themselves with fiscal and monetary policies.
- Private candidates will benefit from a structured approach to instructions offered by recognized institutions.
- When preparing for the examination, candidates need to go beyond memorizing facts and definitions. At this level, they need to be able to interact with the material in a critical and meaningful way.

- Candidates need to apply the study of economics to their everyday lives. This will help them to make sense of many of the concepts and ideas that presently seem abstract and unrelated to their current existence.

#### **Paper 03/1 – Internal Assessment (IA)**

Most students performed well on the IA component of the examination, reflecting closer teacher supervision of students' projects. The synergies among Papers 01 and 02 and the IA were again fully exploited to the advantage of the students. The topics consisted of relevant economic problems to which appropriate concepts, principles and theories were applied, while the projects were kept within the stipulated limits. There was an overall improvement in the quality of the projects.

There is, however, room for improvement in some areas including the following:

- Students need to make better use of empirical data in supporting their findings. The data students present must be relevant to the topic, must be analysed and the results used to support conclusions to which the students arrive. Charts, tables and graphs constructed from data collected must be neatly presented and properly labelled. Data not analysed and discussed should not be included in the report. Some students are not adhering to the word limit placed on the project.
- The word processing software tool should be used to assist in reducing the spelling and grammatical mistakes since these detract from the quality of the work done.
- Students continue to perform below expectations in the higher level competencies such as analysis, synthesis and evaluation. Teachers need to present more opportunities for students to practise these skills.
- Many students continue to have methodological challenges; the method to be employed must be stated, including how the data will be used. The plan must then be followed. Credit must be given to all secondary sources to avoid plagiarism. Sources must be noted in the body of the project and the full citation must be given in the bibliography.
- Teachers must remain vigilant and ensure that the work presented is the student's. Teachers should approve the project, the methodology and the outline, and follow the progress of students over the duration of the project.
- Students should be encouraged to include their primary data collection method in their report.

The projects presented this year reflect closer teacher guidance, resulting in better overall quality of the IAs.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
ADVANCED PROFICIENCY EXAMINATION**

**MAY/JUNE 2011**

**ECONOMICS**

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## **GENERAL COMMENTS**

The CAPE Economics examinations consist of two units – each examined by the following papers:

- Paper 01 - Multiple Choice
- Paper 02 - Essay
- Paper 031 - The School-Based Assessment (SBA) (done by school candidates)
- Paper 032 – Alternative to School-Based Assessment (done by private candidates)

The overall performance of candidates was satisfactory for both units 1 and 2. Performance on Unit 1 was consistent with performance in 2010, while performance on Unit 2 was consistent with that of previous years.

## **DETAILED COMMENTS**

### **UNIT 1: MICROECONOMICS**

Unit 1 dealt with microeconomic theories, concepts and issues. Performance in Unit 1 was satisfactory. The mean mark was 170.95 out of 300 (56.98 per cent). The standard deviation was 43.34.

Unit 1 was divided into three modules:

- Module 1 – Methodology of Economics and the Analysis of Demand and Supply.
- Module 2 – Market Structure, Market Failure and Intervention
- Module 3 – Distribution Theory and Application of Recent Theoretical Developments

#### **Module 1 – Methodology of Economics the Analysis of Demand and Supply**

This module tested candidates' understanding of fundamental concepts of economics – scarcity, choice, opportunity cost, the production possibilities frontier (PPF), Pareto efficiency criteria, the market, demand, supply, equilibrium, price floors, price ceilings, utility maximization, optimal output, normal profit and economic profit – and candidates' ability to apply these concepts to economic problems. Performance on this module was very good. The mean mark was 62.08 out of 100. The standard deviation was 18.93.

#### **Module 2- Market Structure, Market Failure and Intervention**

This module tested candidates' ability to analyse the efficiency with which the market system allocates scarce resources and to demonstrate understanding of economic concepts such as market structure, market failure, the characteristics that distinguish the four main market structures – perfect competition, monopolistic competition, oligopoly and monopoly, two measures of market power and the causes of market failure and government intervention in the market. Performance on this module was satisfactory. The mean mark was 56.82 out of 100. The standard deviation was 18.00.

### **Module 3 – Distribution Theory and Applications of Recent Theoretical Developments**

This module required an understanding of the markets for the factors of production – land, labour, capital and entrepreneurship. It dealt with a number of popular issues. The topics dealt with included the equi-marginal principle (which some candidates found quite challenging), asymmetric information, the labour force, the marginal revenue product (MRP) and the demand for labour, factor mobility in the CSME, the determination of factor prices, rent and transfer earnings, the functional and size distribution of income, inequality and poverty. Performance on this module was satisfactory. The mean mark was 49.47 out of 100. The standard deviation was 14.20.

#### **Paper 01– Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension, application and interpretation of information. The mean mark was 63.70 out of 90. The standard deviation was 26.04.

#### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programmes. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks. Performance on the paper was good. The mean score was 73.10 out of 150. The standard deviation was 26.04.

##### **Question 1**

This question was attempted by 82 per cent of the candidates. Part (a) required candidates to explain the concepts of scarcity, opportunity cost and production possibilities frontier (PPF) with the use of examples. Part (b) required them to state the assumptions on which the PPF is based and to use the production possibilities frontier to demonstrate scarcity, choice, opportunity cost, efficiency (Pareto Optimality) and unattainable combinations of goods.

Most candidates were able to define the key terms and do a rough sketch of the PPF. Some candidates, however, lost marks for not drawing the PPF neatly and correctly labelling it. Many candidates failed to give the assumptions on which the PPF is based and were severely challenged to apply the concepts to it. Many candidates did not know that all points on the PPF were efficient (and therefore Pareto optimal) and that a choice of one of such efficient points had to be made.

Approximately 90 per cent of the candidates who attempted this question performed at an acceptable level, with 74 per cent of them earning at least 11 out of a possible 25 marks. The mean mark was 14.60 out of 25. The standard deviation was 6.09.

### Question 2

This question was attempted by 18 per cent of the candidates, 60 per cent of whom received a satisfactory mark (between 11 and 25).

Candidates were required in Part (a) to explain consumer equilibrium and the effect of a change in income on consumer equilibrium, using the indifference curve approach. In Part (b), candidates were required to distinguish between movements along demand and supply curves and shifts of these curves, as well as explain market equilibrium.

Approximately 75 per cent of candidates knew that consumer equilibrium occurred at the point where the indifference curve and the budget line were tangential, but they did not sufficiently explain consumer equilibrium. Many candidates could not relate the budget line to income and prices and some candidates even confused consumer equilibrium with market equilibrium. However, about 90 per cent were able to explain the effect of an increase in income on consumer equilibrium. In Part (b), many candidates were able to construct a labelled diagram showing market equilibrium, demand, supply, price and quantity and to explain the effect of an increase in consumer income on market equilibrium; however, some candidates could not explain the effect of a change in technology on market equilibrium. The mean mark for this question was 12.74 out of 25. The standard deviation was 5.40.

### Question 3

This question was attempted by approximately 80 per cent of the candidates with approximately 75 per cent to them scoring at least 11 of the 25 available marks.

Part (a) required candidates to explain the concept of market structure, outline the characteristics of different market structures and distinguish among different market structures. In Part (b), candidates were required to explain the pricing and output decisions in monopolistic competition and monopoly and compare and evaluate their performance.

Many candidates performed well on Part (a), though some of them could not give a complete definition for market structure. Some candidates also did not focus on how the characteristics of a market structure affected the firm's behaviour and performance. Sections of Part (b) were also well done. Many candidates demonstrated knowledge and understanding of the monopoly and monopolistic competition in the long- and short-run. They were challenged to demonstrate understanding of the term *conduct* relating to the monopoly and monopolistic competition and failed to mention the efficiency criteria in terms of output and the associated cost incurred at that output level relative to price and revenue. The mean mark for this question was 13.63 out of 25. The standard deviation was 5.00.

### Question 4

This question was attempted by approximately 20 per cent of the candidates. Candidates found this question very challenging, 41 per cent of them scored at least 11 of the 25 available marks.

Part (a) required candidates to distinguish among private goods, public goods, private cost and social cost. Part (b) required them to evaluate the measures used by government to correct market failure and to outline the causes of market failure.

Most candidates were able to define private cost and social cost and identify relevant examples of each. They were also able to distinguish between private goods and public goods, but were unable to explain the terms. Candidates' greatest challenge was in identifying pricing solutions in regulating a natural monopoly. The mean mark on this question was 8.67 out of 25. The standard deviation was 4.83.

#### Question 5

This question was attempted by 54 per cent of the candidates, 34 per cent of whom scored between 11 and 25.

Part (a) required candidates to explain the rewards of the factors of production. Part (b) required them to outline the marginal productivity theory and Part (c) required candidates to state the relationship between the variable marginal price of labour and the demand curve for labour and apply the marginal productivity theory to decision making.

Part (a), which related to the rewards of the factors of production, was well done by most candidates, the majority of whom (60 per cent) were able to draw the diagram. Part (c) presented the greatest challenge to candidates. Some candidates were able to score the full marks in this section. The following is the response of a candidate who scored the full marks for Part (c).

*The relationship between the value of the marginal product of labour and the firm's labour demand is that the falling part of the variable marginal product curve is the firm's demand curve for labour as diminishing returns sets in. It shows the inverse relationship between the wage rate and the quantity of labour where an increase in the wage rate would result in a decrease in the quantity of labour employed and a decrease in the wage rate would result in an increase in the quantity of labour (demanded).*

The mean mark was 9.06 out of 25. The standard deviation was 4.33.

#### Question 6

This question was attempted by 46 per cent of the candidates, with 56 per cent of them gaining satisfactory scores.

Part (a) required candidates to explain the concepts of wage differentials and compensating wage differentials. Part (b) required them to distinguish between absolute and relative poverty and to outline the factors that contribute to poverty. Part (c) required candidates to outline government strategies to alleviate poverty, to analyse the cost of poverty and the benefits of policies aimed at poverty alleviation.

Most candidates were able to define poverty and address the topic of basic needs and the poverty line. The concepts of wage differentials and compensating wage differentials provided the greatest challenge to candidates. Most candidates were unable to explain why a minimum wage imposed on a labour market in perfect competition may not alleviate poverty. The mean mark for this question was 10.60 out of 25. The standard deviation was 3.75.

## **Paper 03/2 – Alternative to School-Based Assessment**

Paper 032 consisted of three questions, one from each module. Candidates were required to research a given theme in preparation for the examination. Paper 032 attempts to simulate the skills assessed in the internal assessment.

The theme for Paper 032 was “Investigate the impact of the mobile services operations in your country.” Forty-four candidates wrote this paper. Performance on this paper was poor. The mean mark was 12.86 out of 60. The highest mark on this paper was 29 out of 60.

In this paper, candidates were presented with a short scenario which formed the stimulus for the three questions which followed.

### Question 1

Part (a) required candidates to identify and explain four major factors that affect the demand and supply of mobile services. Part (b) required candidates to state and apply the formula for calculating elasticity and evaluate the result.

Many candidates were able to identify the factors that determine demand, but found explaining how the factors affect demand for mobile services very challenging. Part (b) was very challenging for most candidates. Many of them were unable to state the formula and apply it to the calculation of elasticity. Many candidates were also unable to evaluate the elasticity coefficient. Performance on the question was poor. The mean mark was 3.12 out of 20. The standard deviation was 2.95.

### Question 2

Part (a) required candidates to identify the goals of firms in the cellular industry and explain how the goals can be achieved. Part (b) required them to explain the characteristics of the market structure of the industry.

The performance of candidates on this question was generally poor. In part (a), many candidates were able to state the goals of firms, but were unable to explain how they can be achieved. Only a few candidates were able to define corporate responsibility. In Part (b), many candidates were able to identify some of the characteristics of the oligopoly market structure but were unable to give adequate explanations of them. The mean mark on this question was 6.19 out of 20. The standard deviation was 3.76.

### Question 3

Part (a) required candidates to draw and use a demand and supply diagram of the labour market to explain how the wages of highly skilled mobile service workers can be divided into transfer earnings and economic rent. In Part (b), candidates were required to explain the effect of labour mobility on wages.

Part (a) was well done by most candidates. Many of them were able to draw the demand and supply diagram. However, they were challenged in explaining transfer earnings and economic rent. Many candidates were unable to define the terms or identify the areas on the diagram that represented them. In Part (b), candidates seemed not to have understood the terms geographical and occupational mobility. The question was poorly done. The mean mark was 3.49 out of 20. The standard deviation was 2.05.

## **UNIT 2: MACROECONOMICS**

Unit 2 dealt with macroeconomic theories, concepts and issues. Many candidates demonstrated a good grasp of the subject matter. Overall, the responses were good. The mean for Unit 2 was 173.04 out of 300 (57.68 per cent). The standard deviation was 45.70.

Unit 2 was divided into three modules:

- Module 1 – Models of the Macroeconomics
- Module 2 – Macroeconomic Problems Policies
- Module 3 – Growth, Sustainable Development and Global Relations,

### **Paper 01 – Multiple Choice**

#### **Module 1 - Models of Macro economy**

This module required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts, national income accounting, the Keynesian consumption function, the determinants of money demand, real interest rates, the labour supply and labour demand, the natural level of unemployment, and real and nominal gross domestic product (GDP) at factor cost and market prices. Performance on the module was fair. The mean mark was 57.79 out of 100. The standard deviation was 17.56.

#### **Module 2 – Macroeconomic Problems and Policies**

Module 2 tested candidates' knowledge of monetary and fiscal policy: money demand, money supply, the interest rate, the effects of changes in the interest rate, the role of the central bank, the Keynesian liquidity preference framework and motives for holding money. The module also dealt with discretionary fiscal policy and automatic stabilizers, deficits, surpluses, the national debt and the debt service ratio, unemployment and crowding out. The mean mark was 56.81 out of 100. The standard deviation was 18.48.

#### **Module 3 – Growth, Sustainable Development and Global Relations**

This module dealt with the determinants of growth, foreign trade and commercial policy, international organizations, multinational corporations, economic integration, globalization, the balance of payment accounts, the determination of exchange rates, the advantages and disadvantages of fixed and floating exchange rate regimes. Performance on the module was good. The mean mark was 54.36 out of 100. The standard deviation was 17.83.

### **Paper 01– Multiple Choice**

This paper consisted of 45 items, 15 questions on each module. The items spanned knowledge, comprehension and application. Performance on the paper was good. The mean mark was 68.72. The standard deviation was 30.02. Approximately 87 per cent of the candidates scored at least 50 per cent of the maximum available marks on this paper. One candidate achieved the maximum mark.

## Paper 02 – Essays

This paper consisted of six questions, two per module. Candidates were required to answer one of two questions from each of the modules. Each question was worth 25 marks. The mean score was 46 per cent.

### Question 1

This question was attempted by 55 per cent of the candidates, 61 per cent of whom scored between 11 and 25 marks. Part (a) required candidates to explain the concept of National Income Accounting and the different approaches to arriving at national income. Part (b) required candidates to use the National Income Accounts to analyse the performance of the economy and derive real GDP and nominal GDP and relate them to economic growth. Part (c) required candidates to draw the Keynesian  $45^0$  diagram and use it to explain how the equilibrium level of national income is determined.

Overall, the question was well done. Some candidates were unclear of the nature of intermediate goods and did not know that intermediate goods should be excluded from the calculation of national income to avoid double counting. In Part (b), most candidates were able to calculate GDP, but some of them could not distinguish between real and nominal GDP. Many candidates were severely challenged to draw the Keynesian  $45^0$  diagram and explain how equilibrium is determined. The mean mark was 11.53 out of 25. The standard deviation was 4.96. Two candidates achieved the maximum available mark.

### Question 2

This question was attempted by 45 per cent of the candidates, 68 per cent of whom scored between 11 and 25 marks. Part (a) required candidates to explain the relationship between savings and consumption. Part (b) required candidates to explain the consumption function. Part (c) required them to calculate the simple multiplier and Part (d) required them to explain the factors that influence aggregate supply.

Many candidates correctly defined the marginal propensity to consume (MPC) and the average propensity to consume (APC), but some of them found the formulae challenging. Many candidates seemed unfamiliar with the Keynesian consumption and did not know how increases in income affect the MPC and the APC. Many of them also could not draw the required diagram correctly and neatly. In Part (c), most candidates calculated equilibrium income and the multiplier correctly and in Part (d) most of them were able to identify the determinants of aggregate consumption, though a few candidates gave microeconomic responses. The mean mark was 13.57 out of 25. The standard deviation was 6.12. Eighteen candidates achieved the maximum available mark.

### Question 3

This question was attempted by 67 per cent of the candidates and 66 per cent of them achieved a score of 11 or more out of 25 marks. Part (a) required candidates to identify the types of demand for money. Part (b) required them to define and explain the tools of monetary policy. Part (c) required candidates to explain the relationship between monetary policy and aggregate demand. Part (d) required candidates to outline and explain the quantity theory of money and identify the school of thought with which the quantity theory is associated. In Part (e), candidates were required to explain how changes in the money supply by the Central Bank could lead to inflation.

Most candidates were able to identify the motives for holding money, but many of them failed to explain the speculative motive. The tools of monetary policy were generally well known, though some candidates lacked this knowledge. Most candidates had a good understanding of the relationship between monetary policy and aggregate demand. Most candidates knew the quantity theory of money, but found explaining the variables in the equation quite challenging. Part (e) was well understood by most candidates. Candidates' performance on this question was good. The mean mark was 12.78 out of 25. The standard deviation was 6.06. Five candidates achieved the maximum mark.

#### Question 4

This question was attempted by 33 per cent of the candidates, 34 per cent of whom gained 11 marks or more out of 25 marks. Part (a) required candidates to outline three methods of financing a fiscal deficit, while Part (b) required them to explain the effects on specific variables of financing the deficit. Part (c) required candidates to rationalize the high demand for the United States (US) dollar. Part (d) required candidates to distinguish between fiscal policy and monetary policy and to evaluate the effectiveness of fiscal policy.

For Part (a), many candidates were able to state the methods of financing fiscal deficits and explain taxation, but they found the explanation of other methods challenging. Part (b) appeared to have challenged most candidates as they were unable to explain the effects on specific variables of financing the variables. Many candidates found Part (c) particularly challenging and were unable to give reasons for the high demand for the US dollar. Candidates were also challenged in Part (d). They found distinguishing between monetary and fiscal policy measures to be very challenging. Candidates made a good attempt at evaluating the effectiveness of fiscal policy measures, but did not adequately explain the effects of fiscal measures. The mean mark on this question was 9.08 out of 25. The standard deviation was 4.65. The highest mark on this question was 24 out of 25. This was achieved by one candidate.

#### Question 5

This question was attempted by 38 per cent of the candidates, 40 per cent of whom earned at least 11 of the 25 marks. It required candidates to state the main economic features of globalization and to evaluate the effectiveness of the major factors on the process of globalization. Candidates were also required to define the term *balance of payments* and demonstrate knowledge of a balance of payments deficit and the effect of a financial crisis on the balance of payments.

Many candidates demonstrated limited knowledge of the main features of globalization and the major factors influencing the process of globalization. They found distinguishing between the two quite challenging. Many candidates were also unable to define the term *balance of payments*. They confused balance of payments deficit with budget deficit. Some candidates also confused financial crisis with natural disasters and were unsure of what the global crisis was as well as its economic effects. The question required the use of higher-order competencies, but many candidates did not demonstrate these abilities in answering the question. Many to them simply stated points. The mean mark was 9.53 out of 25. The standard deviation was 5.43.

### Question 6

This question was attempted by 62 per cent of the candidates, 49 per cent of whom earned at least 11 of the 25 available marks. Part (a) required candidates to define the term *exchange rate* and to state the exchange rate of three countries. In Part (b), candidates were required to distinguish between a fixed exchange rate regime and a flexible exchange rate regime and to explain the advantages and disadvantages of each.

Most candidates were able to define the term exchange rate, many cited the exchange rate for their particular country only but not those of other countries. Candidates were also not conversant with the advantages and disadvantages of the two exchange rate regimes and were unable to develop them. Candidates also confused free trade and integration. The mean mark was 11.04 out of 25. The standard deviation was 6.10.

The theme of Paper 032 was “Investigate the effectiveness of the transportation system in your country and comment on the implication for the rest of the economy”. Thirty-one candidates wrote this paper. Performance was less than satisfactory. The mean mark was 21.45 out of 60. The standard deviation was 8.96.

### Question 1

In Part (a), candidates were required to define the term *aggregate supply*, to describe the shape of the classical aggregate supply curve and the Keynesian short-run aggregate supply curve. In Part (b), they were required to explain, using demand and supply curves, how during a recession, government spending to build transportation infrastructure can contribute to the economic recovery of an Economy. In Part (c), candidates were required to explain how the classical school of economics would respond to a recession.

A fair number of candidates were able to define the term aggregate supply. However, many of them were unable to describe the shape of the classical aggregate supply curve and the Keynesian short-run aggregate supply.

Many candidates did not label the diagram correctly, neither did they show a shift in the aggregate demand. Most candidates demonstrated that they understood that the classical model does not allow for government intervention. The mean mark was 5.48 out of 20. The standard deviation was 4.23.

### Question 2

Part (a) required candidates to define basic economic terms such as *fiscal policy*, *budget surplus and transfer payments*. Part (b) required them to identify sources from which government may borrow large sums of money to finance infrastructural development and Part (c) required them to evaluate two negative consequences of government borrowing to the economy. Part (a) was fairly well done, however some candidates had difficulty identifying suitable sources of financing for specific purposes. Part (a) was poorly done. Many candidates simply stated the negative consequences rather than evaluated them. The mean mark was 8.65 out of 20. The standard deviation was 3.29.

### Question 3

This question tested candidates' knowledge of balance of payments and economic growth. Part (a) required candidates to define the term *balance of payments* and to identify accounts that are included in the balance of payments. Part (a) required them to define the term *economic growth* and to outline ways in which an inefficient transport system can hinder a country's economic growth. Part (c) required candidates to discuss three ways in which an efficient transportation infrastructure can have a positive impact on a country's balance of payments. Part (a) was fairly well done by most candidates. Many candidates also gave reasonable definitions for economic growth, in Part (b)(i), but many of them failed to outline ways in which a country's economic growth can be hindered by an efficient transportation system. Part (c) was not well done, many candidates focused on the impact of an efficient transport system on government revenue and economic growth, rather than on the balance of payments. The mean mark was 7.32 out of 20. The standard deviation was 4.50.

### **RECOMMENDATIONS TO TEACHERS**

Economics has been deemed the dismal science, perhaps because it brings to the fore the truth that every choice or decision has consequences, good and bad. Those who focus on the bleak side of economics eschew the benefits of the science and the joys of teaching and learning the discipline. Scarcity is a fact of life and gives rise to choices. The choices people make determine what commodities the society will produce and the size of the GDP, which businesses will prosper or lay-off workers, the prices at which commodities will be sold, how much of the GDP will be consumed and saved for investment, the inflation rate, the level of imports and exports and the exchange rate. A student preparing for CAPE examinations must decide which subjects to take and how much time he or she will devote to each subject and how much time to give to entertainment and other activities. The teacher introduces the student to the various models and graphical techniques and others that facilitate the teaching and learning of economics. The following are some useful tips recommended to teachers:

- Paying attention to details pays high dividends. Teachers must ensure that students go beyond the superficial and see the logical linking of ideas that culminate in a conclusion. The consumer buys more of a normal good when its price falls because the good becomes relatively cheaper compared to those goods whose prices remained unchanged and hence became relatively more expensive (the substitution effect) and because the real income of the consumer increased (the income effect).
- Teachers must ensure that basic concepts and ideas are thoroughly understood by students. Students need to know the resources and factors of production. They must understand what is meant by scarcity of resources and how the scarcity of resources leads to society and individuals having to make choices as well as the consequences of the choices.
- Decisions are made at the margin and it is important for students to grasp the equi-marginal principle and optimality.
- Teachers must encourage students to capitalise on the links between economics and other disciplines. Students should be encouraged to take mathematics along with economics. Algebra and geometry facilitate the learning of economics.

- Many questions in the examination require candidates to draw diagrams and marks were awarded for neatness and accurate labelling of diagrams, but many candidates presented shoddy work which resulted in the loss of marks. Teachers can assist students in this area by insisting that these practices are demonstrated in the classroom.
- Teachers must emphasize the diagram of the market, the slopes of the demand curves and the factors that cause the curves to shift. Similarly, teachers should emphasize the small Keynesian model of the economy, the consumption function, the investment function, import and export functions and the government in the economy, using equations to calculate national income equilibrium, the multiplier and closing the recessionary and inflationary gaps.
- In effect, teachers should spend the most time on the most challenging aspects of the syllabus; the comparison of the market structures, the determination of the exchange rate, the effectiveness of fiscal and monetary policy measures and similar topics.

Overall performance was at best fair, candidates' performance can be improved if they engage in higher-level competencies.

### **RECOMMENDATIONS TO CANDIDATES**

- In order for private candidates to perform well on Paper 032, they ought to prepare thoroughly for the examination by researching the given theme, gathering relevant information on the theme and organizing the information by to the modules.
- Many private candidates may be constrained by time and resources because of obligations, and hence may not be able to devote as much attention to their studies. In addition, many private candidates try studying on their own without formal, supervised instructions but they need to be aware that the demand at the CAPE level is greater than that at the level of CSEC, hence, it will be beneficial if they are enrolled in an academic institution where they received guidance.
- Private candidates need to familiarize themselves with the syllabus, the format and requirement of the examination.

### **Paper 031 – School-Based Assessment (SBA)**

The majority of students performed well on the SBA component of the examination, this is evidence of improved teacher supervision of students' projects. Generally, the projects selected were properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented and analysed and warranted conclusions were drawn. Many students demonstrated an excellent understanding of the concepts, principles and theories. The mean for the SBA for Unit 1 was 40.23 out of 60. The standard deviation was 8.77. The mean for Unit 2 was 38.01 out of 60. The standard deviation was 10.62.

While performance on the SBA was satisfactory, further improvements can be gained by implementing the following suggestions:

- The writing of the bibliography can be improved by using a standard, acceptable format consistently.
- The presentation of diagrams, tables and charts need to be neater and must be used efficiently. Students should choose the method of data presentation that is most appropriate for the type of data to be presented. In addition, diagrams and charts need to be labelled and discussed or explained.
- Students should use the word processing software to enhance their presentations thereby ridding them of spelling and grammatical errors as far as possible.
- Students must elevate their performance at the higher level competencies. They must practice applying the theories and using them to analyse events that are constantly occurring. They should use the theories to evaluate policies and synthesise novel solutions. Teachers should encourage this approach to learning the subject.
- Some students continue to confront methodological challenges. Teachers should set an early deadline for students to submit a proposal (a plan) for doing their SBA. Such a proposal will identify the topic to be done, why that topic was chosen, what is expected to be learnt, what was done on the topic by others, how the research was conducted, the findings and implications.
- Students must avoid plagiarism and must practise good ethical behaviour when conducting research. Credit must be given for all work of other researchers. The recycling of previous work is totally unacceptable. Sources must be given in the body of the work and the full citation in the bibliography.
- Students must keep their project within the word limit and should include their data in an appendix.
- Teachers seem to be monitoring more closely the work done by students. They are encouraged to maintain their vigilance by following the progress of students' work closely.

Teachers and students must be commended for the improvements observed in the quality of the projects submitted.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION®**

**MAY/JUNE 2012**

**ECONOMICS**

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## **GENERAL COMMENTS**

The CAPE Economics examinations consist of two units – each examined by the following papers:

- Paper 01 – Multiple Choice
- Paper 02 – Essay Questions
- Paper 031 – School-Based Assessment (SBA) (done by school candidates)
- Paper 032 – Alternative to School-Based Assessment (done by private candidates)

The overall performance of candidates was satisfactory for both Units 1 and 2. Performance on Unit 1 was consistent with performance in 2011, while performance on Unit 2 was consistent with that of previous years.

Unit 1 dealt with microeconomic theories, concepts and issues. Two thousand seven hundred and seventy-four candidates sat the Unit 1 examination. Performance on Unit 1 was fair. The mean mark was 159.08 out of 300 (53.03 per cent). The standard deviation was 42.85.

Unit 1 was divided into three modules:

- Module 1 – Methodology of Economics and the Analysis of Demand and Supply
- Module 2 – Market Structure, Market Failure and Intervention
- Module 3 – Distribution Theory and Application of Recent Theoretical Developments

Module 1 tested candidates' understanding of indifference curve analysis, total cost, marginal cost, averaged fixed cost, average total cost and variable cost. Performance on this module was satisfactory. The mean mark was 57.75 out of 100. The standard deviation was 18.60.

Module 2 tested candidates' ability to analyse the efficiency with which the market system allocates scarce resources and to demonstrate understanding of economic concepts such as market structure, market failure and deadweight loss, the characteristics that distinguish the four main market structures — perfect competition, monopolistic competition, oligopoly and monopoly. Candidates were also required to distinguish between normal and economic profits as well as to calculate the Four-Firm concentration ratio and the Herfindahl-Hirschman Index. Additionally, they were asked to define efficiency and market failure, distinguish between private and social benefit, compare characteristics between private and public goods and explain how public goods cause market failure, as well as how government intervention in the market responds to the problems of externalities and public goods. Performance on this module was fair. The mean mark was 49.43 out of 100. The standard deviation was 15.82.

Module 3 required an understanding of the rewards for the factors of production. It dealt with a number of popular issues. The topics dealt with included derived demand, marginal productivity theory, transfer earnings and economic rent, monopsony, wage differentials, the labour force, the marginal revenue product (MRP) and the demand for labour, perfect competition in the labour market, and factor mobility in the Caribbean Single Market and Economy (CSME). Performance on this module was fair. The mean mark was 47.51 out of 100. The standard deviation was 16.57.

Unit 2 dealt with macroeconomics theories, concepts and issues. Many candidates demonstrated a good grasp of the subject matter. Overall, the responses were good. The mean for Unit 2 was 163.05 out of 300. The standard deviation was 48.94.

Two thousand and seventy two candidates sat the Unit 2 examination.

Unit 2 was divided into three modules:

Module 1 – Models of Macroeconomics

Module 2 – Macroeconomic Problems and Policies

Module 3 – Growth, Sustainable Development and Global Relations

Module 1 required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts, national income, the Keynesian consumption theory and the classical model. Performance was fair. The mean mark was 50.83 out of 100. The standard deviation was 19.61.

Module 2 tested candidates' knowledge of unemployment, interest rates, inflation, national debt, monetary and fiscal policy. The mean mark was 54.49 out of 100. The standard deviation was 19.04.

Module 3 dealt with international trade, economic integration, and the balance of payment accounts. Performance on the module was poor. The mean mark was 48.62 out of 100. The standard deviation was 18.13.

## **DETAILED COMMENTS**

### **UNIT 1 – MICROECONOMICS**

#### **Paper 01 – Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension and application. The mean mark was 57.36 out of 90. The standard deviation was 14.26.

#### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programmes. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks. Performance on the paper was less than satisfactory. The mean mark was 59.18 out of 150. The standard deviation was 27.53.

#### **Question 1**

This question was attempted by 64 per cent of the candidates, 46 per cent of whom scored at least 50 per cent of the available marks. Part (a) required candidates to define the terms *indifference curve* and *budget line* and to draw a diagram of the budget line and indifference curve and use it to explain consumer equilibrium. They were also required to use the diagram to explain the effect of a price

decrease of a good on consumer equilibrium. Part (b) required candidates to define the substitution and income effects and explain them with the aid of a diagram.

In Part (a), most candidates were able to correctly define the concepts and use the diagram to adequately explain consumer equilibrium. The effect of consumer equilibrium on the decrease in the price of a good was also well done. Many candidates were able to score the maximum mark on this part of the question. In Part (b), many candidates were unable to give precise definitions of the substitution and income effects as well as to recognize the resultant increase in purchasing power arising from a decrease in the price of a good. Many candidates who attempted this part of the question were not able to use the imaginary budget line to separate the effects. However, a few candidates did an excellent job of distinguishing the income from the substitution effect.

This area of the course is precise and technical and more time should be devoted to explaining the concepts and practising drawing the diagrams in order to ensure proper internalization and improved candidate performance.

### Question 2

This question was attempted by 48 per cent of the candidates, 54 per cent of whom scored at least 50 per cent of the available marks. Part (a) required candidates to state the formula for the various costs as well as to calculate the values for the various costs at given levels of output. In Part (b), they were required to explain the relationship between the marginal cost and the average total cost, with the aid of a diagram. Part (c) required candidates to draw a diagram of the marginal cost curve and the average variable cost curve and use the diagram to explain the relationship between these two curves and the supply curve.

In Parts (a) and (b), the majority of candidates were unable to demonstrate knowledge of the formulas for computing the various costs. The mathematical relationship between average and marginal values was not well demonstrated. Similarly, many candidates were unable to correctly calculate the types of cost averages since quantity was not used as the denominator. In Part (c), a number of candidates drew diagrams of product curves rather than cost curves. Further, some based their responses on the average cost curve rather than the average variable cost curve. A significant number of candidates did not recognize that the portion of the marginal cost curve above the average variable cost curve is in fact the supply curve of the product. In a few instances, candidates used the data from the table to plot the various curves. This was not required since the output range was inadequate for depicting the proper relationship between the curves. This resulted in the loss of valuable marks.

This area of the syllabus requires an appreciation of the mathematical relationships among the relevant concepts and students should be given adequate practice in calculating the various costs as well as constructing cost curves and interpreting them. It must be emphasized that teachers should ensure that students appreciate that marginal cost will pull up average cost only when it is above average cost and marginal cost will pull down average cost when it is below average cost regardless of whether the marginal cost is falling or rising. The statistics relating to cricket can be used to illustrate how marginal scores will impact average scores.

### Question 3

This question was attempted by 50 per cent of the candidates, 34 per cent of whom scored at least 50 per cent of the available marks. This question tested candidates' knowledge of the theory of the firm.

Part (a) required candidates to distinguish between normal profit and abnormal profit as well as to define the concept of market structure. In Part (b), candidates were required to demonstrate their knowledge of the features/characteristics of the various market structures. Part (c) required candidates to compute and interpret two measures of industrial concentration.

Most candidates were able to correctly distinguish between the two types of profits. The concept of market structure was also widely known. The majority of candidates was able to secure the maximum in this section; however, some candidates failed to maximize their scores by focusing only on the degree of competition rather than on its impact on the behaviour and performance of the firms. Some candidates failed to state that the monopoly's product is unique. The majority of candidates did not demonstrate an understanding of the measures of industrial concentration. They were unable to state the correct formulae, apply the formulae and interpret the results.

The theory of the firm and measures of industrial concentration are essential components of the syllabus and precision and accuracy are required in studying the material. Teachers should allocate sufficient time to their delivery so that proper internalization can occur. Group research on the various market structures and student presentations to the class may assist in enhancing understanding.

#### Question 4

This question was attempted by 61 per cent of the candidates, 20 per cent of whom scored at least 50 per cent of the available marks. Part (a) required candidates to define the concepts of '*economic efficiency*' and '*market failure*' while Part (b) required them to distinguish between private and social benefits and to explain how the divergence between the two concepts causes market failure. In Part (c), candidates were required to compare the characteristics of public goods with those of private goods. They were also required to explain how the non-provision of public goods causes the market to fail and how governments can respond to correct the non-provision of public goods and the existence of externalities. In Part (d), candidates were expected to use a diagram to explain how monopoly equilibrium results in a deadweight loss to society.

Most candidates were unable to give the expected definition of economic efficiency as *the production of the maximum output from a given set of inputs*. Alternatively, those candidates who opted to explain pareto optimality were also rewarded. Most of them recognized positive externalities as *the difference between private and social benefits* and many were able to use *excludability and rivalry/diminishability* to distinguish between public and private goods. Government intervention through fiscal spending, taxation, regulation and legislation were all recognized as corrective mechanisms. It was expected that candidates would show the deadweight loss to society through the loss of consumer and producer surpluses. However, many candidates depicted and explained the deadweight loss with predominantly the use of externality and to a lesser extent, government's intervention in the market by the imposition of a tax. In these instances, candidates were able to secure a mark if they correctly identified the deadweight loss diagrammatically.

As the facilitator, teachers must devote adequate time to the delivery and assessment of this area of the syllabus. They must also emphasize the strict use of economic terminologies when defining these concepts as well as in distinguishing a private good from a public good. Students should avoid stating that 'public goods are provided by the government or that public goods are free goods'. With regard to the deadweight loss, extensive practice in drawing and interpreting diagrams of the various situations in which it can occur will assist students in improving their performance.

### Question 5

This question was attempted by 67 per cent of the candidates, with only 10 per cent of them scoring 50 per cent or more of the maximum available marks. This question focused on the theory of distribution with emphasis on the labour market. The expectation of Part (a) was that candidates would be able to identify the factors of production and their rewards and to explain the concept of derived demand. In Part (b), candidates were required to state the marginal productivity theory and explain how this concept is related to the demand for labour. In Part (c), candidates were required to distinguish between transfer earnings and economic rent using a diagram as an aid. With a presupposition that the supply curve is vertical, they were also required to state the values of economic rent and transfer earnings. In Part (d), candidates were required to discuss the effects of monopsony on the labour market. Given the interest rate, life span and MRP, candidates were required to apply the marginal productivity theory to determine the price for a capital item in Part (e).

The factor and their rewards were identified by most candidates but the concept of derived demand was not always properly explained. Candidates also failed to use an example to explain the concept. The explanation of marginal productivity theory and its relationship with the demand for labour was poorly handled by most candidates. It was expected that candidates would *state what MRP is, show how it is calculated and how employers use it to determine how many workers to hire by equating it to the market wage. Candidates could have also stated that the MRP curve is the demand curve.* The distinction between transfer earnings and economic rent was satisfactorily done by most candidates. Most candidates were also able to correctly recognize *economic rent as the total earnings and transfer earnings as zero when the supply curve of the factor was vertical.*

Many candidates were able to explain monopsony as a labour market structure but some showed improper understanding by making reference to one buyer of final goods and services rather than labour. Some misinterpreted the word *effect* and discussed trade union and government intervention rather than stating the behaviour of the monopsonist in terms of how it decides on the quantity of labour to employ and the level of reward paid to the factor. The calculation of the price of the capital item was a major challenge for candidates. They did not apply the present value formula to determine same. That is,

$$\text{Price of computer} = \frac{\text{MRP}}{(1+r)} + \frac{\text{MRP}}{(1+r)^2}$$

It is recommended that candidates be engaged in in-depth discussions on the subject matter as well as in doing work practical examples to illustrate the concepts.

### Question 6

This question was attempted by 44 per cent of the candidates, 43 per cent of whom scored at least 50 per cent of the available marks. The question tested candidates' understanding of the distribution theory with specific emphasis on wage differentials. In Part (a), candidates were required to define the term *wage differentials* and outline two factors that gave rise to wage differentials. In Part (b), candidates were required to compare the level of wages in a perfectly competitive labour market with a market in which the buyer has monopoly in the factors of production market (monopsony). In

Part (c), candidates were required to explain two types of labour mobility and to discuss the effects of labour mobility on the labour market of CARICOM member states.

Part (a) was well done. Candidates were able to define wage differentials as well as state the factors that cause wage differentials. Candidates discussed, for instance, the level of education and experience of the worker as two factors. However, the heterogeneity of the attributes of the worker should be treated as one factor. The responses to Part (b) were very interesting as candidates demonstrated varying interpretations of the question. Two interpretations were provided for on the answer key. That is, monopoly compared with a perfectly competitive labour market and monopsony compared with a perfectly competitive labour market.

Candidates were required to state the equilibrium wage and employment determination point. They were also required to state the wage and employment levels under monopoly or monopsony and that of the firm in a perfectly competitive labour market. In most instances, candidates drew the diagram depicting the monopsonist, which was acceptable. Candidates also made relevant reference to the diagram in their discourse. With respect to the types of mobility, candidates were able to explain the types but in some instances they failed to correctly identify the types as either occupational or geographical. Candidates were expected to state the effect of the mobility on the labour market of CARICOM states. Some candidates were precise in their responses by stating the effects on the wage levels and the supply of labour. Others mentioned all the social ills of migration which were outside of the scope of the question and the subject.

Teachers are encouraged to urge their students to read the questions carefully before responding. In addition, greater attention must be paid to the distribution theory, specific emphasis should be placed on how firms (under perfect and imperfect competition) determine wages in the market as well as prices of their goods and services. This area of the syllabus may be taught through group discussions and the extent of the candidates' learning be assessed by means of a debate.

### **Paper 032 – Alternative to School-Based Assessment**

For Paper 032, candidates were given the following information: "During an investigation in a certain country it was found that the demand curve of the industry was the demand curve of the firm". Candidates were required to research the topic in preparation for the examination and to answer three questions based on it. Forty-five candidates wrote the examination.

#### **Question 1**

Part (a) required candidates to draw a diagram to show the demand curve and explain its shape. Part (b) required them to outline three factors that may cause the demand curve to shift. Part (c) tested candidates' ability to calculate the price elasticity of demand of a monopolist product using the midpoint formula and to interpret the result. The final part in the question, Part (d) required candidates to identify three factors that may determine the price elasticity of demand for the product.

Candidates generally provided reasonable responses to Parts (a) and (b). There were a few, however, who cited 'price' as a determinant that causes the demand curve to shift. The responses in Part (c) showed that some candidates did not know the correct formula for price elasticity of demand and many had trouble interpreting the result.

Candidates should improve on interpreting elasticity, which is honed through practice, therefore it is recommended that teachers emphasize this through the use of practice sheets.

### Question 2

Part (a) required candidates to explain the relationship between the *monopolist's demand curve* and the *marginal revenue* curve. Part (b) tested candidates' ability to compare and contrast four characteristics of perfect competition and monopoly. In Part (c), candidates were required to use a diagram to compare the output and pricing decisions of monopoly and perfect competition.

A wide cross section of candidates provided plausible responses to Part (a) and (b). Most candidates demonstrated competence in using a diagram to explain the relationship between the monopolist marginal revenue curve and the demand curve, moreso than by using words. The assumption is that they were not clear about the relationship. In this question, candidates were expected to give the reason for the relationship. Only a few candidates were able to do this. In Part (b), candidates were required to compare and contrast, but instead of doing so most simply listed the characteristics of perfect competition and then those of the monopoly. Some candidates wrote the implications of the market structures rather than the characteristics. For example, they compared the type of profits of the two in different time periods. In Part (c), many candidates were unaware that the comparison between perfect competition and monopoly is superimposed on one diagram; most candidates gave separate diagrams for perfect competition and monopoly.

Teachers should assist students in differentiating between the characteristics of the entities and the implications of these characteristics.

### Question 3

Part (a) required candidates to differentiate between *size distribution* and *functional distribution* of income. Part (b) tested candidates' ability to use a diagram to illustrate the case of a monopoly that is making positive economic profit or monopoly rent and explain how this may affect the functional distribution of income. The final part of the question, Part (c), required candidates to discuss one method by which governments attempt to redistribute income and evaluate the effectiveness of this method. Part (c) was the only section of the question that was generally well known; however, some candidates were unable to sufficiently discuss the method that they selected and even more so to evaluate its effectiveness. Most candidates were unable to differentiate between *size distribution* and *functional distribution* of income in Part (a). Part (b) seemed to have created a challenge for most candidates, especially the part that required them to explain how monopoly rent can affect the functional distribution of income.

Teachers are encouraged to reinforce instructional terms such as *differentiate, evaluate* and *discuss*, so that students will be aware of the extent of the responses they are required to produce. Most candidates had difficulty evaluating, but this reflects a deeper problem than students' understanding of terms, rather it is a problem related to students' ability to evaluate, this deficiency should be addressed.

### **Paper 031 – School-Based Assessment (SBA)**

The majority of students performed well on the SBA component of the examination, this is evidence of improved teacher supervision of students' projects. Generally, the projects selected were properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented and analysed and warranted conclusions were drawn. Many candidates demonstrated an excellent understanding of the concepts, principles and theories. The mean for the SBA for Unit 1 was 42.47 out of 60. The standard deviation was 8.43.

#### **Strengths**

- Students demonstrated good grasp of the knowledge and understanding components of the theories and concepts outlined in the syllabus.
- Students selected topics that were more tailored to microeconomic objectives and which were better aligned to the scope of the syllabus.
- The aims and objectives were plausible and achievable in the presentation of the reports.
- The general layout of the projects was good.
- There has been great improvement in students' ability to select appropriate sources for data collection.
- Most students incorporated the use of tables, charts and graphs in their projects.

#### **Weaknesses**

- There was some evidence of plagiarism.
- Students did not cite sources from which they garnered information. In addition, on occasions when the citation was done; it was incorrectly done.
- In many cases some of the diagrams that were presented were not incorporated into the discussions.
- Diagrams were poorly labelled, therefore, they did not add any value to the projects.
- Recommendations and conclusions were disjointed from the analysis and synthesis of the projects.
- Students' analytical skills appeared very weak.
- Students' presentation of the projects were not always organized in the format and based on the criteria outlined in the syllabus.

#### **Recommendations**

- Students' need to synthesize and analyse data by using the charts and tables. This should be done by incorporating the charts, graphs and theories into their presentations and then evaluating how well the theories fit with the research conducted. It is very acceptable to agree or disagree with the theories.
- Students' research should be based on the problem statement or objectives.

## UNIT 2 – MACROECONOMICS

### **Paper 01 – Multiple Choice**

This paper consisted of 45 items, 15 questions on each module. The items spanned knowledge, comprehension and application. Performance on the paper was good. The mean mark was 60.21 out of 90. The standard deviation was 16.07. Approximately 47 per cent of the candidates scored at least 50 per cent of the maximum available marks on this paper.

### **Paper 02 – Essays**

This paper consisted of six questions, two per module. Candidates were required to answer one of two questions from each of the modules. Each question was worth 25 marks. The mean mark was 64.58 out of 150. The standard deviation was 30.73.

#### Question 1

This question was attempted by 90 per cent of the candidates, 45 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to differentiate between Gross Domestic Product (GDP) and Gross National Product (GNP). Part (b) required them to define the income and expenditure approach to measuring GDP and outline how each approach is calculated. Part (c) required candidates to discuss two ways in which growth in a country's GDP may negatively impact the country's standard of living. Part (d) required that candidates distinguish between the *marginal propensity to consume* (MPC) and the *average propensity to consume* (APC) and state how each is calculated. Part (d) required candidates to use the simple Keynesian consumption theory to explain the effect of a rise in income on the MPC and the APC.

Candidates demonstrated a clear understanding of the standard of living and how increased GDP can affect quality of life. They appear to have a better understanding of the expenditure approach than the income approach. Candidates provided plausible definitions of the APC and the MPC and stated how they are calculated. However, they experienced some challenges in distinguishing between the GDP and the GNP and were unable to define GNP. Candidates could not explain the effect of an increase in income on the APC and were generally unsure of the effect of income on the MPC and the APC.

Teachers need to dedicate more instructional time to the teaching of these concepts, and provide ample opportunities for students to practise questions involving calculations. Teachers need to help students to develop their analytical skills by providing suitable environments and opportunities.

#### Question 2

This question was attempted by nine per cent of the candidates, 42 per cent of whom scored at least 50 per cent of the available marks. Part (a) required candidates to use the classical model to explain why disequilibrium employment exists. Part (b) required them to analyse how the global recession may impact the aggregate demand and output of a country economy using aggregate demand and supply curves. Part (c) required candidates to identify three non-price determinants of aggregate supply and explain how each determinant influences the level of aggregate supply.

Several candidates were able to identify three non-price determinants of aggregate supply and explain how each determinant influences the level of aggregate supply. Their responses were, for the most

part, clear and concise. Most candidates were able to draw and label the diagram required in Part (b). They were also able to state how the global recession may impact the aggregate demand and output. However, Part (a) proved to be challenging for some candidates who relied on diagrams to answer the question even though diagrams were not required. Most candidates spoke generally about the classical model instead of answering specifically what the question required. Some candidates ignored the prompt of the *global recession* mentioned in Part (b) and this negatively affected their scores.

Candidates need to be encouraged to pay closer attention to key concepts in the questions. In this way, they should be able to recall information related to the particular concepts. In other words, interpreting the question in the correct context, for instance, the mention of the word *global* should alert candidates to the fact that re-export will be affected.

### Question 3

This question was attempted by 73 per cent of the candidates, 55 per cent of whom scored at least 50 per cent of the available marks. Part (a) required candidates to distinguish between *unemployment* and *underemployment* as well as outline four types of unemployment. Part (b) required candidates to, with the use of examples, describe two types of inflation as well as differentiate between *nominal interest rate* and *real interest rate*. Part (c) required candidates to explain how expansionary monetary policy may be used, instead of fiscal policy, to increase employment in the economy.

Most candidates were able to adequately distinguish between *unemployment* and *underemployment*. However, they were unable to effectively outline the types of unemployment and mentioned, in particular *voluntary unemployment*. Candidates were able to describe the two types of inflation. However, they were inaccurately named as ‘cost pull’ and ‘demand push’. In relation to *demand pull* inflation, several candidates failed to include the aggregate supply constraint in their description of the concept. Candidates used microeconomic examples instead of macroeconomic examples. Candidates were unable to differentiate between *nominal interest rate* and *real interest rate*.

*Nominal interest rate is the going interest rate on consumer/producer loans. There is no single nominal interest rate; there are many nominal interest rates. It is calculated by using the value of interest paid divided by the principal of the loan. Real interest rate is nominal interest rate minus the rate of inflation.*

The most problematic section of the question was Part (c) as candidates seemed to have misinterpreted it — they compared fiscal policy and monetary policy as mechanisms to increase employment within the economy. There was rarely any logical progression from the increase in money supply resulting in a reduction in interest rate then an increase in aggregate demand and ultimately an increase in employment.

Teachers should use practical examples to assist students in differentiating among the types of unemployment. Teachers should emphasize the use of macroeconomic examples in explaining macroeconomic terminologies. Teachers are also advised to pay more attention to the teaching of the transmission mechanism.

#### Question 4

This question was attempted by 26 per cent of the candidates, 32 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to define the terms, *fiscal policy*, *budget surplus* and *transfer payments*. Part (b) required candidates to outline three limitations of monetary policy and three limitations of fiscal policy. Part (c) required them to identify four sources of government borrowing to finance their expenditure. Part (d) required candidates to evaluate three possible negative consequences of government borrowing.

Candidates were able to define the terms *fiscal policy* and *budget surplus* but they were unable to define the term *transfer payments*. *Transfer payments are payments made by governments to individuals that involve no productive activity like old age pensions, welfare and so on.* Candidates were able to identify at least three of the four sources of government borrowing to finance their expenditure. However, some candidates were repetitive with respect to naming international lending agencies. Parts (b) and (d) proved to be challenging for candidates. Candidates were unable to identify limitations of monetary and fiscal policies. They had difficulty in harnessing the skill to evaluate as they were only able to state certain negative consequences of government borrowing but were unable to assess them.

Teachers need to focus on distinguishing between monetary and fiscal policy with respect to managing aggregate demand. Specific efforts should be placed on skills of analysis, synthesis and evaluation. This will definitely improve students' overall performance.

#### Question 5

This question was attempted by 64 per cent of the candidates, 28 per cent of whom scored at least 50 per cent of the maximum available mark. Part (a) required candidates to explain the term *economic integration*. Part (b) required that candidates outline three benefits and three costs associated with economic integration. Part (c) required candidates to outline three major stages of economic integration that CARICOM countries have attempted to achieve over the past 30 years. Part (d) required candidates to evaluate the extent to which countries have achieved economic integration.

Most candidates were able to define the term *economic integration*. However, they failed to mention that *economic integration is the coming together of a group of countries with the goal of increasing economic linkages among the group vis-à-vis the rest of the world.*

Candidates were able to outline the benefits and costs of economic integration. However, there was a tendency for many candidates to integrate non-economic content in this section. Most candidates were able to evaluate the extent to which countries have achieved economic integration. However, they did not effectively expound on the points listed. The most challenging section of the question was Part (c). Most candidates were unsuccessful in identifying and explaining the stages of economic integration. They referred to specific examples of integration within a Caribbean context and therefore spoke about CARIFTA, CARICOM and the CSME rather than the general stages namely, free trade area, customs union (which includes a common external tariff for non-member states) and common market.

Candidates should be guided to organize their responses in a logical, accurate and clear manner in order to improve the quality of their responses. It is recommended that candidates correctly number their responses, skip a line or two between different parts of the question and follow the prompts

given. Teachers need to focus on the economic perspective of economic integration rather than the social and cultural.

#### Question 6

This question was attempted by 34 per cent of the candidates, 22 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to explain the difference between *current account transaction* and *capital account transaction* in the balance of payments statement and to calculate the current account balance as well as the overall balance of payments. Part (b) required candidates to outline four ways in which a global recession may impact the main accounts of the balance of payments. Part (c) required them to distinguish between *absolute advantage* and *comparative advantage*. Part (d) required candidates to discuss two policy options that a country may use to correct a trade deficit.

The majority of candidates was able to distinguish between *absolute advantage* and *comparative advantage*. Most candidates were able to identify two policy options that a country may use to correct a trade deficit. However, some candidates did not focus on how the policy measures identified would address the trade deficit. Candidates were able to correctly indicate what the current account involves. However, they were unaware of what the capital account entails. Candidates failed to say what main balance of payments accounts were affected by the global recession.

Teachers should focus on a step by step analysis of all the accounts in the balance of payments, paying close attention to *net transfers*, *net investment* and not only exports and imports. Terms like *financial assets*, *hot money flows*, *official financing* and *physical assets* should be clearly explained. Close attention should be placed on policy responses (devaluation, trade protection measures and contractionary fiscal and monetary policies) to trade deficits.

#### **Paper 032 – Alternative to School-Based Assessment (SBA)**

For Paper 032, candidates were given the following instruction: “Investigate the impact of rising oil prices on the economy of your country”. Candidates were required to answer three questions based on their investigation. Twenty six candidates wrote this paper. Performance was less than satisfactory. The mean mark was 21.27 out of 60.

#### Question 1

In Part (a), candidates were required to distinguish between *leakages* and *injections* as they relate to the economy. They were required to explain the three main leakages from the circular flow of an economy in Part (b). Part (c) was divided into two sections. In Part (c) (i), candidates were required to analyse the impact of rising oil prices on the aggregate expenditure and aggregate output of the economy of their country. In Part (c) (ii), they were required to identify three injections that may be increased to offset the negative impact of the leakage.

Most candidates were able to distinguish between injections and leakages. They were also able to adequately explain the main leakages from the circular flow. Candidates for the most part were able to identify the three injections that may be increased to offset the negative impact of the leakage. Part (c) (ii) presented difficulties for candidates in that they were unable to adequately and logically

evaluate the impact of rising oil prices on aggregate expenditure and output being a case in point. There is a process that takes place throughout the economy as a result of a supply shock, many candidates were not aware of this.

Teachers and students need to keep abreast of current economic issues. Greater emphasis should be placed on analysis rather than learning definitions and concepts; Part (c) where candidates were required to analyse the impact of rising oil prices on aggregate expenditure and aggregate output being a case in point. It is also recommended that teachers use practical examples and case studies to widen students' scope and aid them in improving their analytical and critical thinking skills.

### Question 2

Part (a) tested candidates' ability to define the terms *inflation*, *labour force* and *unemployment rate*. Part (b) required candidates to evaluate one way in which high or rising oil prices may impact the *inflation rate* and *unemployment rate*. Part (c) required candidates to discuss two ways in which the government may use fiscal policy to help soften the negative impact of rising oil prices on a country.

The majority of candidates did sufficiently well in Part (a), since they were able to accurately define *inflation*, *labour force* and *unemployment rate*. Most candidates knew the final impact of rising oil prices on inflation and unemployment, most were unable to *evaluate* the impact of rising oil prices. However, many candidates did not mention the term *cost-push* inflation in explaining the impact of rising oil prices. It is essential that candidates use the jargon of economics since they are studying at an advanced level. For the most part candidates did not prove that they understood the question, because they seemed to have ignored the directive to discuss ways in which the government may use fiscal policy to help soften the negative impact of rising oil prices on a country. Some candidates did not know the difference between fiscal and monetary policy.

It should be reiterated that candidates should keep abreast of current affairs related to economics, especially when studying macroeconomics. This will assist them greatly as the discipline is aimed at studying current economic issues and seeking remedies. These issues and remedies are generally practised in every country; hence paying attention to current affairs will be beneficial to candidates. Teachers can prompt students by creating assignments that are geared towards making students aware of these issues and which hone their analytical skills. Teachers should also work with students in enhancing their understanding, equipping them with skills on how to interpret questions as well as how to use key words to determine what is required of them. The glossary of terms in the syllabus can assist in this regard.

### Question 3

Part (a) (i) required candidates to define the term *balance of payments* and in Part (a) (ii) they were required to list the three main accounts in the balance of payments. In Part (b), candidates were required to assess three ways in which rising oil prices may impact their country's balance of payments accounts, they were to assume that their country imports all its oil. Part (c) required candidates to discuss two ways by which their country may address the temporary balance of payments crisis due to the higher import bill.

Some candidates were unable to clearly and accurately define the term *balance of payments*, some confused the term with gross domestic product (GDP), or gave partial answers. However, most candidates were able to correctly list at least two accounts in the balance of payments. Many

candidates failed to accurately highlight the impact of rising oil prices on the balance of payments accounts, they would often refer to the ‘balance of payments’ rather than to the specific accounts. Some simply stated the impact on the economy and not on the balance of payments accounts. Candidates also showed their inability to state the ways by which the country can address the balance of payments crisis.

Teachers need to teach this aspect of the syllabus in a very practical way by using real data and statistics from actual countries. In relation to Question 3, teachers are advised to take students to seminars put on by various financial institutions or to invite representatives to class sessions to make presentations on macroeconomic issues that are dealt with by these institutions. This should form the basis of class discussion. This may help students to better appreciate the discipline and enable them to speak and write on various topics and offer economically sound remedies to economic problems.

### **Paper 031 – School-Based Assessment (SBA)**

The majority of students performed well on the SBA component of the examination, this is evidence of improved teacher supervision of students’ projects. Generally, the projects selected were properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented and analysed and warranted conclusions were drawn. Many candidates demonstrated an excellent understanding of the concepts, principles and theories. The mean for Unit 2 was 39.15 out of 60. The standard deviation was 7.92.

#### **Strengths**

- Students demonstrated good knowledge of the theories and concepts necessary to present good projects.
- The topics chosen were appropriate as they were in alignment with the criteria outlined in the syllabus.
- The economic concepts used were related to the topics chosen.
- Economic theories were appropriately used.
- There was evidence of marked improvement in the analysis and interpretation components over 2011 samples.
- Some students demonstrated good referencing of the data sources from which information was gathered.

#### **Weaknesses**

- It was evident that some students are still struggling to formulate appropriate topics.
- Some students were not able to properly analyse secondary data.
- Sometimes the marks awarded by teachers were not consistent with the marking criteria set out in the syllabus, as a result, marks awarded appeared to be inconsistent and subjective.
- Students tended to refer examiners to the syllabus by indicating an objective number rather than stating the actual aims and objectives that were used.
- A large number of the reports were too similar; hence, it is recommended students do their individual write up after collecting the data necessary to complete their projects.

## **Recommendations**

- Students should be guided in formulating topics that are appropriate to the unit to be examined. Microeconomics is based on a specific industry, firm or household. Macroeconomics studies the economy on a whole; however, the problems being researched should be time specific.
- Students should be encouraged to highlight limitations encountered in the use of the instruments employed in carrying out the research and in the methodology to be employed in the report.
- Methodology should speak specifically to design of instruments and validation of the reasons why they are suitable for the specific research.
- Topics chosen should be time period specific, and should be confined to a specific region or country.
- The style of citation and referencing should be used consistently throughout the report.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION®**

**MAY/JUNE 2013**

**ECONOMICS**

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## **GENERAL COMMENTS**

The CAPE Economics examinations consist of two units – each examined by the following papers:

Paper 01 – Multiple Choice

Paper 02 – Essay

Paper 031 – School-Based Assessment (SBA) (done by school candidates)

Paper 032 – Alternative to School-Based Assessment (done by private candidates)

The overall performance of candidates was satisfactory.

Unit 1 dealt with microeconomic theories, concepts and issues. Performance in Unit 1 was good. The mean mark was 165.61 out of 300 (55.20 per cent). The standard deviation was 42.44.

Unit 1 was divided into three modules:

Module 1 – Methodology of Economics and the Analysis of Demand and Supply

Module 2 – Market Structure, Market Failure and Intervention

Module 3 – Distribution Theory and Application of Recent Theoretical Developments

Module 1 tested candidates' basic understanding of demand and supply, and graphical representation of same. It also tested their analytical skills concerning the market model, as well as marginal and average costs. Candidates were required to analyse the supply side of the market and explain the relationship between the supply curve and marginal cost curve. Performance on this module was good. The mean mark was 63.36 out of 100. The standard deviation was 16.62.

Module 2 tested candidates' ability to analyse the efficiency with which the economy allocates scarce resources and to demonstrate understanding of economic concepts such as economic efficiency and market failure. Candidates were also required to explain how various factors contribute to market failure and how government intervention can correct market failure caused by public goods. Candidates were required to identify the major characteristics of perfect competition and draw comparisons between perfect competition and monopolistic competition. Performance on this module was unsatisfactory. The mean mark was 48.29 out of 100. The standard deviation was 17.27.

Module 3 required an understanding of the rewards for the factors of production. It dealt with a number of popular issues such as the effects of minimum wage laws and the impact of an imposition of the minimum wage on the labour market. The concepts tested included marginal productivity theory, transfer earnings and economic rent. Candidates were required to calculate the marginal product and marginal revenue product from the data given and to use the theory to determine the optimal level of employment and explain why that level is optimal. Performance on this module was fair. The mean mark was 50.26 out of 100. The standard deviation was 16.23.

Unit 2 dealt with macroeconomic theories, concepts and issues. Many candidates demonstrated a good grasp of the subject matter. Overall, performance was good. The mean for Unit 2 was 178.46 out of 300 (59.49 per cent). The standard deviation was 47.15.

Unit 2 was divided into three modules:

Modules 1 – Models of the Macroeconomy

Modules 2 – Macroeconomic Problems and Policies

Modules 3 – Growth, Sustainable Development and Global Relations

Module 1 required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts, National Income, the Keynesian Consumption theory and the Classical Model. Performance was good. The mean mark was 59.18 out of 100. The standard deviation was 17.72.

Module 2 tested candidates' knowledge of Monetary Theory and Policy, and Fiscal Policy. Performance was fairly good. The mean mark was 54.76 out of 100. The standard deviation was 18.80.

Module 3 dealt with Growth and Development, International Trade, Exchange Rate and Foreign Direct Investments. Performance on the module was good. The mean mark was 60.35 out of 100. The standard deviation was 19.12.

## **DETAILED COMMENTS**

### **UNIT 1 – MICROECONOMICS**

#### **Paper 01– Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension, application and interpretation of information. The mean mark was 60.16 (66.84 per cent) out of 90. The standard deviation was 16.72. Eighty two per cent of the candidates scored at least 50 per cent of the maximum available marks. Twelve candidates achieved the maximum mark.

#### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programmes. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks. Performance on the paper was disappointing. The mean mark was 62.75 out of 150. The standard deviation was 41.83.

#### **Question 1**

This question was attempted by approximately 86 per cent of the candidates, 73 per cent of whom scored at least 50 per cent of the available marks. Part (a) required the candidates to define the terms *demand*, *supply* and *equilibrium*. In Part (b), candidates were required to calculate demand schedule from given data. Part (c) tested candidates' ability to draw a market diagram identifying *equilibrium*, *equilibrium price* and *equilibrium quantity*. In Part (d), candidates were required to analyse the effects of a tax on market supply and the effectiveness of such a policy.

Approximately 80 per cent of the candidates were able to state the definition for *demand*, *supply* and *equilibrium* in Part (a). Approximately 20 per cent of the candidates were unable to highlight key points in the definitions, for example, in the definition of demand, mentioning being both *willing* and *able* to purchase a good at various prices, would have afforded the candidates the maximum marks. In defining supply, some candidates defined it in terms of *production* of goods rather than *supplying* or *offering* goods on the market. Many did not use the word *price* in their definition.

In Part (b), most candidates were proficient in calculating market demand from the data given. This indicated that the candidates could distinguish between individual demand and market demand. In Part (c), most candidates were able to draw the market diagram showing the demand and supply curves, however a few incorrectly labelled the diagram.

Part (d) (i) proved to be the most challenging part of this question. Candidates were required to apply analytical skills. No candidate was able to score the maximum mark in this part. The minority scored a high of six out of a possible eight marks and the majority scored in the range two to four marks. Candidates focused on the demand side rather than the supply side despite the question explicitly stating that the analysis should be done from the perspective of the supply side. Many candidates did not correctly identify tax as a non-price factor affecting supply.

Therefore they incorrectly associated a rise in price due to the tax with an upward movement along the supply curve, that is an increase in the quantity supplied (the law of supply) rather than a shift in the supply curve to the left indicating an increase in the cost of producing the good.

In Part (d) (ii), approximately 60 per cent of the candidates correctly stated that the government objectives of increasing revenue and reducing obesity were accomplished by the imposition of the tax. However, too many candidates were unable to justify their reasons, in fact many gave reasons that went in direct opposition to the correct statement. This indicated that candidates do not thoroughly understand the concept.

### **Recommendations**

Teachers are encouraged to delve into deeper analysis with students. Students should be taught to explain how the shift factors and movement factor cause the shift or movement. Teachers should also emphasize the difference between non price effects and price effects on supply. Students should be taught the effect of a tax on supply and the incidence of the tax borne by the producer and consumer. Teachers should employ exercises to show the impact that a tax has on a firm, they can draw from case studies in various texts on the subject.

### **Question 2**

This question was attempted by approximately 14 per cent of the candidates, 18 percent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to define *marginal cost* and *average variable cost*. In Part (b), candidates' ability to identify a factor that causes a movement along the supply curve and two factors that cause the supply curve to shift was tested. Part (c) required candidates to draw a diagram of the marginal cost curve and the average variable cost curve and use the diagram to explain the relationship between the supply curve and the marginal cost curve.

In Parts (a) and (b), a significant number of candidates gave an imprecise definition of marginal cost with, some definitions being incomplete. Candidates however displayed more difficulty in defining average variable cost. The majority of candidates were able to identify the factors that caused a shift in the supply curve but a lesser amount knew that the price caused a movement along the curve. Though they were able to identify the factors they did not sufficiently explain how the change was caused. For example:

The movement along the curve as a result of a price increase is due to firms wanting to increase output in response to a higher price, the more the increase output is the more the extra cost of producing an extra unit will increase (marginal cost), firms are therefore willing to incur this higher cost since their cost will be covered by the higher price.

Many candidates simply pointed out that an increase in price will cause a movement up and along the supply curve which represents an increase in quantity supplied.

Part (c) presented a challenge to most candidates; they did not recognize that the supply curve is the marginal cost curve above the average variable cost curve in the perfectly competitive market. Some candidates drew a separate marginal cost curve and superimposed upon that a supply curve; the candidates thereby demonstrated that they did not understand the relationship between the two concepts. Although a few candidates were successful in drawing and labelling the diagram, they did not adequately explain the relationship between the supply and marginal cost curves. Many were also unable to correctly label the curves as well as the axes.

## **Recommendations**

This part of the module tends to be particularly challenging for students. Teachers are encouraged to thoroughly explain *why* the marginal cost curve is the supply curve under perfect competition. Teachers are also encouraged to help students to understand not only the material in the subject but also to understand what is required based on the verbs used in the questions, for example, *evaluate*, *analyses*, these can be found in the glossary of the syllabus. It is believed that students have knowledge but often do not know what is required of them.

### **Question 3**

This question was attempted by approximately 58 per cent of the candidates, 26 per cent of whom scored at least 50 per cent of the maximum available mark. This question tested candidates' knowledge of the theory of the firm. Part (a) required candidates to outline four major characteristics of perfect competition. Part (b) tested candidates' ability to compare the perfectly competitive firm with the monopolistically competitive firm based on the four major characteristics outlined in Part (a). Candidates were then required to compare both perfect competition and monopolistic competition in terms of competition, profits and efficiency.

In Part (a), the majority of candidates stated rather than outlined the characteristics and thus gained only half of the marks allocated. Candidates who attempted to outline scored no additional marks if they simply rephrased what was stated originally. A thorough understanding of the causes and consequences of the characteristics was absent and the typical candidate's response did not align with the mark scheme.

Part (b) required a direct comparison of the characteristics of the two structures. Again, the majority of candidates only stated the characteristics of monopolistic competition without any direct comparison to perfect competition. This allowed the candidates to gain only half of the allocated marks. Stronger candidates were able to make valid and direct comparisons and gain more marks. Some candidates confused the market structures of monopolistic competition with monopoly. Very few candidates scored the maximum available marks on this part of the question.

Part (c) called for a direct comparison of the two structures in terms of (i) competitive behavior, (ii) short run and long run profit level, (iii) efficiency of resource use.

Part (c) (i) was the most challenging part of the question and the majority of candidates gained very low marks. Candidates were very unclear about the concept of competitive behaviour, especially in regard to perfect competition, with many candidates explaining that 'firms competing in perfect competition were highly competitive, even more so than monopolistic competition'. Stronger candidates did not fully understand non-price competition and non-rivalry in perfect competition. Part (c) (ii) on profit levels was very well done. The majority of candidates was clear on the concept and scored well.

Part (c) (iii) proved to be a challenge for the weaker candidates, many of whom could not explain efficiency in the market structures. Candidates stated that monopolistic competition was a more efficient structure or an equally efficient structure to perfect competition. This demonstrated that they were unable to transfer knowledge, as an understanding of the cost structure of the two market structures would be able to assist them in differentiating the efficiency with which they use resources, since the monopolistically competitive firm never operates at the minimum average total cost.

## **Recommendations**

Teachers should not just list the various characteristics but should explain them and show how they are interrelated. Teachers are also encouraged to link the various characteristic (both main and subsidiary) to the diagrams so that students do not learn the diagrams in isolation (this contributes to

them viewing the diagrams as abstract). Linking the characteristics to diagrams also assists with explaining the characteristics well even if diagrams are not required by the question.

#### Question 4

This question was attempted by approximately 42 per cent of the candidates, only 9 per cent of them scored more than 50 per cent of the available marks. Part (a) required candidates to define the concepts *Economic Efficiency* and *Market Failure* while Part (b) tested their ability to explain how monopolies; public goods and negative externalities lead to market failure. In Part (c), candidates were required to evaluate how one government intervention measure could remedy market failure caused by public goods.

Most candidates were able to score in Part (a). However, not many scored the maximum mark as candidates expressed a vague understanding of what it means to be economically efficient and what it means when a market fails. For example, many candidates simply stated that: ‘Economic efficiency refers to when a society makes the best of its scarce resources’. This definition is inadequate. Candidates needed to explain either productive efficiency or allocative efficiency.

In Part (b), many candidates were able to explain how monopolies, public goods and negative externalities lead to market failure. Those who scored well in this part of the question expounded as follows: *Public goods cause market failure due to its underproduction because of its two characteristics namely, non-excludability and non-rivalry.*

Part (c) posed the most challenge because most candidates apparently do not understand what is required of them when they are asked to *evaluate*. According to the syllabus, to evaluate means to, *appraise a matter in hand, citing both advantages and limitations*. Many candidates just expounded on the measure that they mentioned rather than citing the pros and cons. Some candidates gave solutions to market failure caused by other factors apart from non-provision of public goods. For example, many candidates cited ‘taxation’ as a remedy, when it is not logical to tax something that is under produced in the market.

#### **Recommendations**

Teachers need to emphasize that economic efficiency can be looked at from many perspectives:

- The economy perspective (Production Possibilities Frontier)
- The market perspective (demand and supply)
- The firm perspective (perfect competition and monopoly)
- The cost structure of a firm

Teachers should therefore support economic efficiency with more models. Teachers are also encouraged to separate the various causes of market failure and their remedies. They should encourage their students to read widely and take material from various credible sources, to be vigilant and not allow errors in texts to override what is known to be correct economic theory.

#### Question 5

This question was attempted by approximately 53 per cent of the candidates. Only 14 per cent of them scored more than 50 per cent of the marks. This question focused on the theory of distribution with emphasis on the labour market. Candidates were required to outline the marginal productivity theory of factor demand in Part (a). Part (b) tested candidates’ ability to calculate marginal product and marginal revenue product. Candidates were also required to determine the optimal level of labour that the firm would employ and explain why that level is optimal. In Part (c), candidates were required to evaluate the effects of the minimum wage on the labour market. Part (d) required candidates to show the decomposition of earnings into transfer earnings and economic rent, using the market diagram.

In Part (a), candidates confused marginal productivity theory of demand with derived demand. Many of them explained marginal productivity instead of the theory which suggests that an individual firm pays a factor on the basis of its marginal revenue product or how much it adds to revenue.

Marginal product and marginal revenue product were correctly answered for the most part in Part (b). However, when candidates were asked to determine the quantity of labour that the firm would employ, many were unable arrive at the correct answer without surmising. This was made evident in the section Part (b) (iii) where candidates were asked to explain why more or less workers are not employed. Candidates demonstrated a lack of understanding of the resource employment rule and the marginal principle namely:

- To maximize net benefits, the managerial control variable should be increased up to the point where  $MB = MC$ .
- $MB > MC$  means the last unit of the control variable increased benefits more than it increased costs.
- $MB < MC$  means the last unit of the control variable increased costs more than it increased benefits.

### **Recommendations**

Again candidates demonstrated that they did not understand what it means to evaluate, in Part (c). Their responses indicated that they were aware that a minimum wage is a price floor but this was insufficient as they were required to show that some workers benefited from the higher wages and explain how unemployment was caused, by explaining both the supply side and demand side. Most candidates were able to score at least one mark in Part (d) but many confused transfer earnings and economic rent on the diagram.

Teachers should see how best they can allocate time to this section of the syllabus. It is apparent that this is the underlying cause of students not scoring well on this question.

### Question 6

This question was attempted by approximately 47 per cent of the candidates. Only 11 per cent of them scored more than 50 per cent of the maximum available marks. The question tested candidates' understanding of poverty and income inequality. Part (a) tested candidates' ability to differentiate between *functional distribution of income* and *size distribution of income*. In part (b), candidates were required to explain the term *income inequality*. In Part (c), candidates were required to outline how two approaches to measuring poverty — the *basic needs approach* and the *poverty line approach* are used to measure poverty. Part (d) required that candidates draw a diagram of a Lorenz curve and use the diagram to explain how inequality is measured. They were then to explain how the gini coefficient is calculated from the Lorenz curve.

In Part (a), only a few candidates were aware of the distinction between functional and size distribution of income. Many were able to offer a definition of the two but could not definitively pinpoint the difference. Weaker candidates confused *functional* with 'function' and as such related functional distribution of income to persons being paid according to job-related duties.

Most candidates correctly defined income inequality in Part (b), but failed to adequately explain causes and effects of income inequality. Illustrations such as 90 per cent of the population earns 10 per cent of total income and 10 percent of the population earn 90 per cent of total income was lacking. Some candidates resorted to using the gini coefficient and the Lorenz curve to explain the concept. Part (c) proved to be the most challenging, candidates who knew definitions for both the basic needs and the poverty line, could not explain how the approaches were used to measure poverty. Candidates

mostly focused on how the government tries to eradicate poverty rather than explain how these methods were used to measure poverty, for example:

“The basic needs approach selects a number of commodities that are considered essential needs of individuals and households, then it is determined if these needs are met or unmet , then the households are classified as poor if all the needs are not met and classified and non-poor if they are met.”

Many candidates incorrectly explained the basic needs approach as households having income equivalent to essential needs. The basic needs approach does not require a valuation of the goods but whether these goods are accessible to households. This is important to note since individuals may not have the income to purchase food, shelter, clothing and drinkable water, yet they access these because of subsistence and communal living. While candidates identified that persons can fall above or below the poverty line, they failed to follow through on their argument to show specifically which level identified poor and non-poor. There was evidence of confusion between minimum wage and the poverty line.

Candidates performed reasonably well in Part (d) (i) in comparison with the previous sections. Many candidates were able to draw and label the diagram but were unable to use it to explain how income inequality is measured. Others had a correct explanation even though the diagram was incorrect. Many who did not score the maximum available mark for the diagram had some semblance of the correct diagram. Generally, candidates failed to present the precise diagram because of a mathematical knowledge gap, which includes lack of understanding that the distribution is a cumulative distribution. Candidates performed reasonably well on Part (d) (ii). Weaker candidates mentioned that the gini coefficient ranges from 0 to 1 but were unable to interpret the coefficient. Inadequate diagrams led to inadequate conclusions about the formula used to calculate the gini coefficient  $\left(\frac{A}{A+B}\right)$ . Many stated that the denominator represented the area under the Lorenz curve rather than the area under the line of equality.

### **Recommendations**

Teacher should employ projects and group assignments as teaching techniques for this section of the syllabus. This section of the syllabus lends itself to real-world applications that students can relate to and find data on. Doing this will not only help to compete the syllabus in the required time but will also help students to understand what is thought to be a very manageable and straight forward topic. Concerning the Lorenz curve, teachers should gather data and have students plot the Lorenz curve and explain what each coordinate means, this should assist students in drawing the correct curve.

### **Paper 032 – Alternative to School-Based Assessment**

Performance on this paper was generally unsatisfactory. Fifty-four candidates wrote the exam. The mean mark was 19.19 out of 60 (31.98 per cent). The standard deviation was 7.53.

#### **Question 1**

Part (a) (i) required candidates to explain the term *Effective Demand* and part (a) (ii) required them to explain the term *Price Ceiling*. Part (b) required candidates to identify TWO goods on which governments are likely to impose a price ceiling and to explain why a price ceiling would be preferred. Part (c) required candidates to analyse the impact of a price ceiling on the market for milk, with the use of a demand and supply diagram.

Candidates did not fully explain the meaning of both terms in Part (a). Responses had some key words, but omitted important points to earn the maximum mark. Candidates were able to identify two goods on which governments are likely to impose a price ceiling. They were less able to explain why

a price ceiling might be preferred for these goods. The responses in Part (c) showed that candidates were unable to analyse the impact a price ceiling would have on the market for milk. The mean was 7.94 out of 20. The standard deviation was 3.73.

### **Recommendations**

Students need to improve their understanding of demand and supply concepts. This is especially important since demand and supply is the foundation for many topics in economics. The focus should include, but not be limited to, the meaning of price ceilings, price floors and the reasons why they are implemented by governments. Students should also practise analyzing various situations that require demand and supply diagrams.

#### Question 2

Part (a) required candidates to define the term *Monopoly* in Part (i) and the term *Average Revenue* in Part (ii). Part (b) tested candidates' ability to compare the characteristics of perfect competition and monopoly with respect to output levels in Part (i), pricing decisions in Part (ii) and consumer surplus in Part (iii). In Part (c), candidates were required to state three reasons why a monopoly is more likely to cause a less equitable income distribution than a competitive industry.

Candidates were generally able to define *Monopoly*. However, they were not able to define *average revenue*. A wide cross section of candidates did not provide suitable responses to Part (b). This part of the question was quite challenging for many candidates. Candidates were unable to provide comparisons within the contexts of output levels, pricing decisions, and consumer surplus. Responses were in general a list of things characterizing either market structure, but no real comparison was done. In Part (b), candidates were required to compare and contrast, but most of them simply listed the characteristics of perfect competition and then those of the monopoly. In Part (c), many candidates were unable to provide reasons why monopoly results in a more inequitable distribution than a competitive industry; responses were not grounded in economic theory. The mean was 4.5 out of 20. The standard deviation was 3.23.

### **Recommendations**

Candidates are urged to consider the characteristics of each market structure more carefully. They should compare and contrast each market structure with respect to various contexts, such as the ones given in the question, along with several others, for example, level of profit, cost structure, and so on. In this regard candidates should ensure that they take into account that *compare* means to discuss the similarities, while *contrast* means to discuss the differences.

#### Question 3

Part (a) (i) required candidates to define the term *Income Inequality*; Part (a) (ii) required them to distinguish between *absolute poverty* and *relative poverty*; and Part (a) (iii) required candidates to identify four factors that contribute to poverty in their country. Part (b) required candidates to assess the distribution of income in a country taking into account the percentage received by households and where households fall in the income distribution in relation to the mean income in the distribution. The final part of the question, part (c), required candidates to assess the effectiveness of any two strategies used by governments to alleviate poverty from the given list (health, education or housing).

Part (iii) of (a) was the only Part of (a) that candidates answered reasonably well. In Part (b), candidates had difficulty assessing the income distribution as they did not establish the main point which was that a small fraction at the top of the distribution controls a disproportionately high level of income, while the larger fraction at the bottom controls a disproportionately low level of income. Candidates' responses in Part (c) were more descriptive. They gave examples of policies that could

alleviate poverty, but did not assess how effective they might be. The mean was 6.70 out of 20. The standard deviation was 2.40

### **Recommendations**

Candidates should increase their knowledge and understanding of topics in Module 3. In addition, they should improve their higher order skills from merely identifying to evaluating

#### **Paper 031-School-Based Assessment (SBA)**

The majority of students performed well on the SBA component of the examination, this is evidence of improved teacher supervision of students' projects. Generally, the projects selected were properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented and analysed and warranted conclusions were drawn. Many students demonstrated an excellent understanding of the concepts, principles and theories. The mean for the SBA was 40.02 out of 60. The standard deviation was 7.99.

### **Strengths**

- Students selected topics that were more suitable for microeconomic objectives and which were better aligned to the scope of the syllabus.
- The aims and objectives were plausible and achievable in the presentation of the reports.
- The general layout of the projects was commendable.
- Students' ability to select appropriate sources for data collection have shown great improvement.
- Most students incorporated the use of tables, charts and graphs in their projects.

### **Weaknesses**

- Students must be discouraged from plagiarism. They did not cite sources from which they garnered information. In addition, on occasions when the citation was done it was done incorrectly.
- Quite often diagrams were not incorporated in the discussions.
- Diagrams were poorly labelled and therefore did not add much value to the project.
- Recommendations and conclusions did not support the analysis of some projects.

### **Recommendations**

- Students' presentation of the projects should be organized in the prescribed format and based on the criteria outlined in the syllabus.
- Students need to synthesize and analyse data by using the charts and tables. This should be done by incorporating the charts, graphs and theories in their presentations – then evaluating how well the theories fit with the research conducted. It is very acceptable to agree or disagree with the theories.
- Students' research and findings should be based on the problem statement or objectives.

## UNIT 2 – MACROECONOMICS

### **Paper 01 – Multiple Choice**

This paper consisted of 45 items, 15 questions on each module. The items spanned knowledge, comprehension and application. Performance on the paper was good. The mean mark was 63.82 out of 90 (70.91 per cent). The standard deviation was 14.71. Approximately 88 per cent of the candidates scored at least 50 per cent of the maximum available marks on this paper. One candidate scored the maximum mark while 25 scored 44 out of 45.

### **Paper 02 – Essays**

This paper consisted of six questions, two per module. Candidates were required to answer one question from each module. Each question was worth 25 marks. The mean score was 70.87 out of 150 (47.25 per cent). The standard deviation was 32.09.

#### Question 1

This question was attempted by approximately 11.69 per cent of the candidates, 37 per cent of whom scored 50 per cent of the maximum available marks. Part (a) required candidates to explain the term *gross domestic product (GDP) deflator* and state its purpose. Part (b) required candidates to state one reason for a particular transaction being included in or excluded from the GDP calculations of a country. Part (c) required candidates to identify autonomous consumption and the marginal propensity to consume (MPC) from a consumption function, to calculate the equilibrium level of real GDP, and to calculate the spending multiplier and state with justification whether the multiplier will be smaller or larger than the government spending. Part (d) required candidates to briefly describe net national product (NNP) and personal disposable income (PDI) and to state how each is measured.

Candidates demonstrated a clear understanding of the transactions that were to be included in and those that should be excluded from the GDP calculations of a country. Candidates knew the formula for the deflator but could not properly explain the term. They were familiar with autonomous consumption but failed to identify the MPC. The calculation of the equilibrium level of real GDP and the multiplier proved to be a challenge for many candidates. Candidates were only familiar with the simple spending multiplier and did not know that GDP was equivalent to 'Y', the variable for income in the expenditure identity. As it relates to the NNP, candidates knew the formula but could not define the term. They were better able to define the PDI, but were unfamiliar with the actual deductions from income which would result in the PDI. The mean mark was 11.78 out of 25. The standard deviation was 5.03.

#### **Recommendations**

Teachers should strike a better balance between the qualitative and quantitative aspects of national income accounting. They should ensure that all three variations of the multiplier are taught: the simple multiplier; the multiplier including government (tax leakage); and the multiplier in an open economy (imports leakage). They need to expose students to more problems involving calculations of equilibrium GDP.

#### Question 2

This question was attempted by approximately 31 per cent of the candidates, 42 per cent of whom scored 50 per cent of the maximum available marks. Part (a) required candidates to identify four major determinants of investment. Part (b) required candidates to use the Keynesian 45° graph to explain the difference between a *recessionary gap* and an inflationary gap. Part (c) required them to explain how the Classical and Keynesian schools recommend responding to a recessionary gap.

A minority of candidates were able to identify four determinants of investment; most identified just two or three. They were not proficient at drawing, labelling and analysing the *inflationary gap* and the *recessionary gap*. Part (c), while widely known, still proved to be challenging for some candidates as they were unable to say how the Classical and Keynesian schools respond to a recessionary gap. The mean mark was 11.85 out of 25. The standard deviation was 6.83.

### **Recommendations**

Teachers should specify the type of approach that students should use in the explanation of the *inflationary gap* and *deflationary gap*. It is recommended that these gaps be drawn on separate diagrams, as when candidates drew both gaps on one diagram, they experienced problems in properly identifying them. More attention should be placed on clearly distinguishing between the Classical and Keynesian schools of thought in relation to their prescriptions for recessionary and inflationary conditions in an economy.

#### Question 3

This question was attempted by approximately 68 per cent of the candidates, 37 per cent of whom scored 50 per cent of the maximum available marks. Part (a) required candidates to define the term *money*, describe two types of money and distinguish between the M1 and M2 definitions of money. Part (b) required candidates to discuss three tools of monetary policy that any central bank in the region can use to help control inflation. Part (c) required candidates to use the Keynesian liquidity preference framework to illustrate how the contractionary policies discussed in Part (b) would impact interest rates and the demand for money.

Most candidates knew the definition of money and were able to describe the types of money. However, they were unable to adequately distinguish between M1 and M2. Most candidates were able to list the monetary tools and discuss how each tool could aid in controlling inflation. However, in their discussions they could not differentiate between the *discount rate* and the *repurchase rate*. Many candidates listed 'interest rate' as a tool of monetary policy when it is truly a consequence of these policies (discount rate and repurchase rate in particular). It was challenging for candidates to show the effect of tight monetary policies; however, most of them were able to state the desired effect of the policies. Several candidates showed a rightward shift for the tight monetary policy instead of a leftward shift. The mean mark was 11.25 out of 25. The standard deviation was 6.80.

### **Recommendations**

Teachers should do more discussions of this topic to prevent regurgitation of rote answers. They should use more realistic situations where students can transfer theoretical knowledge, as this will be more meaningful and relevant to them. Students need more practice drawing diagrams to assess both monetary and fiscal policies.

#### Question 4

This question was attempted by approximately 32 per cent of the candidates, 28 per cent of them scored at least 50 per cent of the maximum available marks. Part (a) required candidates to define the term *Fiscal Policy* and discuss three ways in which fiscal policy can be used by Caribbean governments to increase the level of employment and output in their economies. Part (b) required candidates to outline three reasons why some fiscal measures will not work (have the desired effect) in the small open economies of the Caribbean. Part (c) required candidates to explain the concept *crowding out effect* and state how this effect can be avoided.

Candidates were able to define the term *Fiscal Policy* and discuss three ways in which fiscal policy can be used by Caribbean governments to increase the level of employment and output in their economies. However, candidates had the tendency to eliminate the impact of the policies on aggregate demand and failed to identify examples of fiscal policy (taxes and government spending). Many

candidates incorporated tariffs in their answer and other supply-side policies, rather than focusing on government fiscal policies, which are targeted at changing aggregate demand. Candidates were unable to outline the reasons for fiscal measures not working in the small open economies of the Caribbean. Responses were vague and general. In Part (c) candidates demonstrated significant weaknesses in the description of *the crowding out effect*. For instance, candidates would explain that in order for the government to finance a budget deficit or some other project, they would borrow from local banks. They needed to have said that an increase in the demand for limited loanable funds, brought about by the competition between the government and the private sector for these funds, leads to an increase in the interest rate, which discourages private investment. The mean mark was 10.07 out of 25. The standard deviation was 5.90.

### **Recommendations**

Teachers should encourage students to format their responses in a logical manner to improve clarity. It should be stressed that the objective of fiscal policy is to influence aggregate demand. Students should be encouraged to read widely. Specific efforts should be placed on skills of analysis, synthesis and evaluation to improve candidates' performance.

#### **Question 5**

This question was attempted by approximately 52 per cent of the candidates, 33 per cent of whom scored 50 per cent of the maximum available marks. Part (a) required candidates to distinguish between *economic growth* and *economic development*, and to describe three determinants of economic growth. Part (b) required candidates to explain the concept of *human development index* (HDI) and outline three main indicators of the HDI. Part (c) required candidates to discuss two impediments to economic growth faced by Caribbean economies.

Most candidates were able to provide a conceptual as opposed to a rigorous definition of the term *economic development*. However, candidates were unable to define economic growth and failed to mention *real GDP* in their definitions. Many candidates confused economic growth indicators namely, GDP, GNP and NNP with economic growth *determinants*. Additionally, several candidates identified determinants but were unable to state how each determinant led to economic growth. Many candidates were able to identify literacy rates/educational attainment and life expectancy as indicators of the HDI but very few candidates mentioned GDP per capita as an indicator. Additionally, candidates were unable to explain each indicator. As it relates to Part (c), candidates erred by discussing the economic cost of growth rather than impediments to economic growth. Many candidates stated technology and multinational cooperation activity as factors which impede economic growth and unemployment and inflation as barriers to economic growth which are inaccurate. The mean was 10.68 out of 25. The standard deviation was 6.42.

### **Recommendations**

Candidates must refer to real GDP when explaining economic growth. Teachers must encourage students to pay attention to the directives in the question. In many instances, candidates identified key words and wrote all they knew, instead of tailoring responses to questions asked. To distinguish between two concepts is not merely the provision two definitions. Therefore, candidates should provide two definitions and then clearly show how each concept is different from the other. It is not sufficient to state that economic development is qualitative and economic growth is quantitative. Candidates should not confuse the determinants of growth with the indicators of growth. Students need to be advised that there are only three indicators of the HDI, which includes life expectancy, GDP per capita and literacy rate. There is a need for this area to be emphasized.

### Question 6

This question was attempted by 48 per cent of the candidates, 63 per cent of whom scored at least 50 per cent of the maximum available marks. Part (a) required candidates to define the terms *tariffs*, *quotas* and *non-tariff barriers*. Part (b) required candidates to identify four factors that determine a country's export revenue. Part (c) required candidates to describe fixed and floating exchange rates and to identify one Caribbean country that uses either type of exchange rate. Part (d) required candidates to discuss two advantages and two disadvantages of foreign direct investment (FDI) in the Caribbean.

The majority of candidates were able to define the terms *tariffs*, *quotas* and *non-tariff barriers*. Most candidates were able to identify factors which directly determine a country's export revenues. Weaker candidates mentioned 'variety of good/services exported', 'taxes', 'interest rates' or even 'balance of payments'. Several candidates omitted Part (b). Part (c) presented the most challenge to candidates, as they were unable to describe fixed and floating exchange rates. Too many candidates used synonyms for the description of the fixed and floating exchange rates. Part (d) was well known, as most candidates were able to discuss the advantages and disadvantages of FDI in the Caribbean. The mean mark was 15.30 out of 25. The standard deviation was 5.37.

### **Recommendations**

Teachers should emphasize government intervention in relation to the description of a fixed exchange rate and their efforts to keep it fixed, and for the floating exchange rate the forces of demand and supply for the currency in determining the rate. Students should be taught the economic advantages and disadvantages of FDI, in addition to the social and cultural ones.

### **Paper 032 – Alternative to School-Based Assessment**

Performance on this paper was less than satisfactory. Twenty-nine candidates wrote the paper. The mean was 27.31 of 60 (45.52 per cent). The standard deviation was 14.33.

### Question 1

In Part (a) (i), candidates were required to define the term *aggregate demand* and in Part (ii) state the equation for aggregate demand when the economy is open or has a trade sector. In Part (b), they were required to analyse how a decrease in aggregate demand can impact the aggregate employment and output of an economy. For Part (c), they were required to explain how the economy goes back to equilibrium employment from a position of disequilibrium, according to the classical view.

In Part (a) (i), some candidates were able to properly define *aggregate demand* and *aggregate supply*. However, some candidates defined demand and supply from a microeconomic perspective as opposed to a macroeconomic one. In Part (ii), as most candidates correctly identified the components of aggregate demand for an open economy, inclusive of net exports. In Part (b), candidates for the most part, knew that a decrease in aggregate demand would have a negative impact on output and employment. However, candidates struggled with making the necessary linkages to show how a fall in aggregate demand would affect different sectors of the economy and lead to increased unemployment and lower output. Part (c) presented the most challenge for candidates. While candidates knew that the classical view of the economy is self-correcting, they did not understand the process by which equilibrium would be restored in the economy and therefore had difficulty explaining this process. The mean was 7.52 out of 20. The standard deviation was 5.07.

## **Recommendations**

Students should be taught to distinguish between demand and supply in microeconomics and aggregate demand and aggregate supply in macroeconomics. Candidates should place greater emphasis on analysis rather than learning definitions and concepts. Candidates need to be able to analyse the impact of an event, by demonstrating how it affects certain sectors or groups within the economy and then collating those impacts to see the overall effect on the economy. Candidates need to be able to explain not only the features of the Classical school but also how to demonstrate how equilibrium will be restored from a situation of disequilibrium in different markets.

### **Question 2**

In part (a), candidates were required to distinguish between *unemployment* and *underemployment*. In part (b), they were required to outline three costs of unemployment. Part (c) had two sections. Candidates were asked to solve the problem of high and rising unemployment using two fiscal policy measures in Part (i) and monetary policy in Part (ii).

Most candidates gave a satisfactory definition of unemployment in Part (a); however, they struggled with the definition of underemployment and as a result were unable to make a comparison between the two terms. The majority of candidates were able to identify costs of unemployment in Part (b); however, most of them stuck to social costs as opposed to economic costs and could not go beyond identification. In Part (c), candidates performed poorly mainly because they identified monetary policy measures whereas fiscal policy measures were required and vice versa. In cases where candidates correctly identified the policy measure, they had difficulty explaining how the policy could correct the unemployment problem. The mean was 10.66 out of 20. The standard deviation was

## **Recommendations**

Candidates' responses showed that they focused heavily on unemployment and may have overlooked underemployment. Candidates should ensure that they adequately cover the objectives of the syllabus, especially, specific objectives. While candidates were familiar with the concept of unemployment, it is essential for them to be able to analyse the problem not only from a social but also an economic perspective. Candidates should use their own country as an example to consider both the social and economic costs of unemployment. Similarly, candidates can consider different policy measures employed by their country to explain the intended impact of policies employed and the resultant effectiveness, to appreciate the role of governments in reducing unemployment.

### **Question 3**

Part (a) required candidates to define several concepts: *balance of trade* in Part (i); *trade deficit* in Part (ii); *trade surplus* in Part (iii); and *commodity terms of trade* in Part (iv). In Part (b) candidates were required to outline two ways in which Caribbean countries benefit from increased exports in Part (i) and to explain why high levels of imports can be a challenge for Caribbean countries in Part (ii). Part (c) required candidates to discuss two policy options that a country may adopt to correct a trade deficit and boost unemployment in the local economy.

In Part (a), some candidates were able to adequately define balance of trade, trade deficit and trade surplus, however the majority of candidates were unable to define *commodity terms of trade*. In Part (b), many candidates were able to identify benefits that countries derive from imports but struggled in explaining why large amounts of imports may pose a challenge to the importing country. In Part (c), candidates were able to see the benefits mainly from a consumer perspective but could not identify with producers and therefore struggled to see the challenges imports may pose to the economy. They were able to identify policy measures but were unable to show how they could be used to correct a trade deficit or help with unemployment. The mean was 9.14 out of 20. The standard deviation was 5.36.

## **Recommendations**

Candidates need to focus on both the advantages and disadvantages of imports and exports. Once again it is important that country examples from throughout the region are considered to demonstrate the impact both exports and imports have on consumers and producers. Candidates must develop their higher order skills, since the responses showed that they could define and identify but could not evaluate or analyse. For example, candidates could identify proper policy measures but were deficient in their ability to apply the policy to correct specific problems within the economy.

### **Paper 031 – School –Based Assessment (SBA)**

The majority of students performed well on the SBA component of the examination, this is evidence of improved teacher supervision of students' projects. Generally, the projects selected were properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented and analysed and warranted conclusions were drawn. Many students demonstrated an excellent understanding of the concepts, principles and theories. The mean for the SBA for Unit 1 was 40.02 out of 60. The standard deviation was 7.99. The mean for was 42.53 out of 60. The standard deviation was 8.76.

## **Strengths**

- The titles formulated were appropriate to the unit as they were in alignment with the criteria outlined in the syllabus.
- The economic concepts used were related to the topics chosen.
- Economic theories were appropriately used.
- There was evidence of improvement in the analysis and interpretation components of the data.
- Some students correctly demonstrated good referencing of the data sources from which information was gathered.

## **Weaknesses**

- It was evident that some students were still struggling to formulate appropriate topics.
- Students were not able to properly analyse secondary data.
- Students have a tendency to refer examiners to the syllabus by stating a number rather than stated aims and objectives they used.

## **Recommendations**

- Some teachers need to adhere to the marking criteria set out in the syllabus as the marks appear to be inconsistent and subjective.
- Students should be guided in formulating topics which are appropriate to the unit to be examined.
- Students should be encouraged to show limitations encountered in using the instruments selected to carry out the research and the methodology employed in the report.
- Methodology should speak specifically to design instruments and validate the reasons why they are suitable for the specific research.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION®**

**MAY/JUNE 2014**

**ECONOMICS**

## GENERAL COMMENTS

The CAPE Economics examinations consist of two units – each examined by the following papers:

Paper 01 – Multiple Choice

Paper 02 – Essay

Paper 031 – School-Based Assessment (SBA) (done by school candidates)

Paper 032 – Alternative to School-Based Assessment (done by private candidates)

The overall performance of candidates was satisfactory.

### **UNIT 1**

Unit 1 dealt with microeconomic theories, concepts and issues. Performance in Unit 1 was good. The mean mark was 166.83 out of 300 (55.61 per cent). The standard deviation was 46.26.

Unit 1 was divided into three modules:

Module 1 – Methodology of Economics and the Analysis of Demand and Supply

Module 2 – Market Structure, Market Failure and Intervention

Module 3 – Distribution Theory and Application of Recent Theoretical Developments

Module 1 tested candidates' basic understanding of the central problem of economics, scarcity in relation to the production possibilities curve as well as the alternative mechanism through which scarce resources are allocated. The module also examined the theory of consumer demand, specifically the calculation and interpretation of price elasticity of demand and the concept and graphical representation of consumer surplus. Performance on this module was fair. The mean mark was 56.01 out of 100. The standard deviation was 17.46.

Module 2 examined candidates' ability to calculate and analyse cost and revenue data in relation to a market structure. They were also required to analyse the characteristic of *no barriers to entry and exit* - to analysis the long run condition of the perfectly competitive firm. Also tested was candidates' in-depth understanding of market failure and how asymmetric information in the used car market and negative externalities contribute to market failure. The concepts tested included public goods, externalities and asymmetric information. Performance on this module was fair. The mean mark was 50.07 out of 100. The standard deviation was 18.74.

Module 3 required an understanding of demand and supply factors. Concepts tested were derived demand and demand and supply of labour. Also examined was the marginal productivity theory particularly the concept and calculation of the *least cost rule*. The module also tested candidates' understanding of poverty and inequality and the application of the Gini coefficient and the Lorenz curve to the concept of inequality. Candidates were also required to draw and interpret the Lorenz curve and the related Gini coefficient. They were also required to know how government alleviates poverty and inequality. Performance on this module was satisfactory. The mean mark was 55.67 out of 100. The standard deviation was 18.59.

## **UNIT 2**

Unit 2 dealt with macroeconomic theories, concepts and issues. Many candidates demonstrated a good grasp of the subject matter. Overall, performance was good. The mean for Unit 2 was 175.57 out of 300 (58.82 per cent). The standard deviation was 47.88.

Unit 2 was divided into three modules:

Modules 1 – Models of the Macroeconomy

Modules 2 – Macroeconomic Problems and Policies

Modules 3 – Growth, Sustainable Development and Global Relations

Module 1 required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts, National Income, the Keynesian Consumption theory and the Classical Model. Performance was good. The mean mark was 60.28 out of 100; Standard deviation was 19.30.

Module 2 tested candidates' knowledge of Monetary Theory and Policy, and Fiscal Policy. Performance was fairly good. The mean mark was 52.02 out of 100. The standard deviation was 19.03.

Module 3 dealt with Growth and Development, International Trade, Exchange Rate and Foreign Direct Investments. Performance on the module was good. The mean mark was 58.96 out of 100. The standard deviation was 17.89.

## **DETAILED COMMENTS**

### **UNIT 1 – MICROECONOMICS**

#### **Paper 01 – Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension, application and interpretation of information. The mean mark was 58.74 out of 90 (65.27 per cent). The standard deviation was 15.98. Seventy-eight per cent of the candidates scored at least 50 per cent of the maximum available marks. Six candidates achieved the maximum mark.

#### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programs. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks. Performance on the paper was less than satisfactory. The mean mark was 32.62 out of 75 (43.49 per cent). The standard deviation was 14.33.

### Question 1

This question tested candidates' knowledge of the central problems of economic, including scarcity, production possibility frontier and types of economic systems. The question was attempted by approximately 84 per cent of the candidates, 44 per cent of whom scored at least 50 per cent of the available marks. One candidate achieved the maximum available mark.

Performance on this question was only fair. The mean was 11.62 out of 25 (46.48 per cent). The standard deviation was 4.75.

Part (a) required the candidates to define the term *scarcity*; draw and label the production possibilities frontier (PPF) and to use the PPF to explain the concepts of scarcity and economic growth. In Part (b), candidates were required to state the differences between a *command economy* and a *free market economy*.

Most candidates gave a partial definition for Part (a) (i). Candidates either wrote about limited resources only or unlimited wants only. Few spoke about consequences of scarcity for example high prices instead of defining the term. Some candidates wrote the definition for shortage instead of the definition for scarcity.

For Part (a) (ii), some candidates drew the demand, supply and indifference curves instead of the required PPF. Some curves were incomplete because they did not touch the boundaries. Some curves drawn were not labelled. Some candidates did not use the information in the question to label the graph. Few labelled the axes incorrectly or did not use correct title for diagram.

In Part (a) (iii), most of the candidates were able to define opportunity cost. The candidates who were unable to do so gave incomplete definitions. Definitions ranged from: 'next best choice given up'; 'next best cost given up' and 'opportunity forgone'. Candidates explained combinations of goods rather than mentioning the opportunity cost aspect. For example, most candidates mentioned that you could produce 20 units of food and 50 units of clothing but did not mention exactly how much of one good you had to give up in order to get more of the other or that if you produced more food, then less clothing would be produced and vice versa. A significant number of candidates did not relate the concept of opportunity cost with the diagram drawn as required by the question. For the most part, the candidates understood that a choice would have to be made because of scarcity and this resulted in opportunity cost.

For Part (a) (iii) (b), some candidates mentioned short term growth instead of long term growth which was required. There were candidates who spent much time defining economic growth and failed to answer what caused economic growth. A significant number of candidates gave the definition for economic growth instead of stating a factor that could cause the PPF to shift outward. Some candidates were successful in giving three factors that would cause the shift but a few failed to show it on the PPF. For those who did not show the shift, many mentioned that the curve would move to point 'x' or 'y' or some point outside of the PPF.

In Part (b) (i), most candidates were able to distinguish between the two economic systems mentioned in the question. However, some candidates interchanged the free market with the mixed economy or they compared the command economy with the monopoly market structure. Some candidates also compared the free market system with perfect competition.

In this part of the question, a few candidates mentioned that the command economy is closed; that there is lack of resources or technology, which is not factual. Also inaccurate is the statement that ‘there is/are no rule (s) in the free market economy and that consumers are free to do what they want’. Some candidates even stated that the government controls everything in the free market economy. Several candidates confused advantages and disadvantages of the command economy with the characteristics of the planned economy.

Candidates managed to outline the disadvantages but did not put forward implications of the disadvantages in Part (b) (ii). A number of candidates confused the advantages with disadvantages. Many candidates were unable to develop the points that they listed in order to score full marks. The majority of candidates found this question to be very challenging. Candidates spent time discussing the disadvantages of the planned economy and failed to identify and discuss the points that would cause the demise of this economy.

### **Recommendations**

Teachers are encouraged to delve into deeper analysis with students. Teachers should go beyond listing disadvantages and advantages of the different economic systems but also explore the implications and related issues. It is clear that this topic has been overlooked by the teachers and might be assumed to be taught in other subjects, which might be true, therefore it is the teachers’ responsibility to go beyond recall and teach students how to analyse, the basics concepts. Teachers should emphasize the distinction between shortage and scarcity. Demand should not be confused with human wants nor should supply be confused with resource endowment. Supply and demand are precise concepts and should be taught as such as not used loosely.

Emphasis must be placed on the importance of labelling the diagrams and having appropriate/ correct titles. Reference must always be made to the question e.g. if food and clothing are given as variables for the axis students should use milk and cheese as alternative variables. So if a scenario is given in the stem of the questions students are required to use the information given in their answer, thereby refraining from labelling the axes “x” and “y” or “good x” and “good y”. They should do the same in the discussion.

As it relates to the PPF teachers should clearly distinguish between long-term growth and short-term growth and the circumstances under which these are achieved as well as pivots versus shifts. It is suggested that teachers encourage students to pay attention to the marks allotted for the question as well as the instructive words used in the stem, as this is a guide to the amount of information needed for their answers.

Teachers would also emphasize to students that when stating the differences between two terms they should clearly give the contrast without the use of the phrase ‘vice versa’, ‘and the other is not’ etc. Teachers should emphasize the differences between economic systems and market structures.

### **Question 2**

Question 2 tested candidates’ knowledge of consumer demand. The question was attempted by approximately 16 per cent of the candidates, 57 per cent of whom scored at least 50 per cent of the maximum available mark. Two candidates achieved the maximum available mark. Performance on

this question was satisfactory. The mean was 13.20 out of 25 (52.80 per cent). The standard deviation was 6.17.

Part (a) tested the candidates' ability to recall the determinants of price elasticity of demand and to calculate and interpret the concept. Part (b) required candidates to sketch the demand curve from given coordinates, determine the revenue regions and advice the firm on its pricing decision. Part (c) tested the candidates' understanding of consumer surplus and required them to illustrate, graphically, consumer surplus in the context of a price floor.

Though Part a (i) required candidates to list the determinants of price elasticity of demand (PED) many listed the determinants of demand instead. Part a (ii) required the candidate to calculate PED. Many candidates were unable to show the sequential calculation of PED. They also ignored the negative sign throughout the calculation for change in demand. Many candidates used the point method rather than the arc method in calculating PED. While many candidates stated that the PED for the good was elastic, they did not explain what it meant.

In Part b (i), candidates were required to sketch the demand curve for the firm, showing the revenue before and after the price change. Many candidates lost marks for not clearly illustrating the before and after regions on the diagram.

Candidates were required to advise ABC company on a pricing decision in Part b (ii). Some candidates made reference to the law of demand instead of analyzing the effect of elasticity on the revenue of a firm.

Part c (i) required candidates to define the term *consumer surplus*. Some defined consumer surplus in terms of 'benefits' and not the difference between what they are willing to pay and what they actually pay for a good or service.

Finally, candidates were required to use a well labelled diagram to illustrate consumer surplus after the imposition of a price floor, in Part c (ii). Many candidates were unable to superimpose the price floor in the correct position on the diagram. Many of them omitted the supply curve while still identifying consumer surplus, however, this is not possible as it can only be done against the background of a market equilibrium. Candidates also had difficulty identifying the correct consumer surplus position after the imposition of a price floor.

## **Recommendations**

Teachers are encouraged to emphasize the calculation of elasticity and the concept of elasticity as well as the application of elasticity results. Teachers should also emphasize that every point along the demand curve represents how much an individual who demands the good is willing to pay for the good. This might be futile if students are not taught thoroughly how to read off points on a diagram. It is also recommended that teachers do not teach topics in isolation but make linkages between topics so that students can have a more rounded learning experience.

### Question 3

Question 3 tested candidates' knowledge of market structure. The question was attempted by approximately 48 per cent of the candidates, 62 per cent of whom scored at least 50 per cent of the maximum available mark. Seven candidates achieved the maximum available mark. Performance was fair. The mean was 12.33 out of 25 (49.32 per cent). The standard deviation was 5.80.

This question tested candidates' knowledge of the theory of the firm. Part (a) required candidates to calculate marginal and average cost values from given data and to plot same curves. In Part (b), candidates were required to explain the relationship between marginal cost and average cost assisted by an example. The question further required the candidates to use the information in the table to determine the market structure represented by the table. Finally, in Part (c) students were required to analyse how the characteristic of "no barriers to entry and exit" ensures the long run condition of a perfectly competitive firm.

In Part (a) (i) a number candidates were successful in computing the marginal cost correctly or the average cost but a smaller number were able to compute both. Some candidates confused the average cost and the marginal cost by putting them under the wrong column.

A common thread found in Part a (ii) was that many candidates did not use the information in the table to plot the graph, this did not reflect the students inability to plot the curves but their inability to follow clear instructions. Some candidates had difficulty labelling the axes correctly, many candidates labelled the y-axis 'price' OR 'quantity' OR 'y' whereas others did not label it at all. Many candidates did not apply appropriate scales to the Cartesian plane. Many of them had challenges plotting the curves correctly.

In a few instances some candidates mistook the average cost (AC) for the independent variable rather than the dependent variable in relation to the marginal cost (MC), in Part b (i). In that same section, a significant number of candidates fail to mention the point that when MC rises AC is still falling. Most candidates were unable to give the example required to show the relationship between MC and AC. Instead of stating the relationship between MC and AC some candidates were defined them.

In Part (b) (ii), the majority of the candidates were able to identify the market structure but they were unable to justify them. Those who were able to justify only mentioned one point, namely, that the firm had constant marginal revenue. Most candidates were successful in listing the characteristics of perfect competition namely barriers to entry, but those who did not mention this spoke about many buyers and sellers.

### **Recommendations**

Teachers should emphasize that students use the information in the table to plot graphs where applicable. Emphasize proper labelling of graphs for market structure. Teachers should accentuate the relationship between the MC and the AC but stress that ***when MC starts to rise AC is still falling***. Teachers are encouraged to use a variety of examples to bring across the relationship between MC and AC. Teachers need to teach the reverse to Part (c). That is,

- There is a lack of barriers to entry/freedom of entry and exit
- If firms are making subnormal profits they leave the industry

- This will cause Industry supply to go down
- Causing market price to increase
- Until  $P = AC$  and all firms are making normal profits.

#### Question 4

Question 4 tested candidates' knowledge of market failure. The question was attempted by approximately 52 per cent of the candidates, only 16 per cent of them scored more than 50 per cent of the available marks. The highest mark was 24 out of 25, this was achieved by one candidate. Performance on this question was weak. The mean was 7.16 out of 25(28.64 per cent). The standard deviation was 4.84.

Part (a) required candidates to define the term 'public goods' and explain why these are normally provided by the government. In Part (b), candidates were expected to define the term 'externality'. They were given a diagram illustration a negative production externality, and were required to label the diagram and mention three policies that the private sector could adopt to correct market failures. Part (c) required the candidates to identify the issue of asymmetric information from a scenario given and to explain how it can lead to market failure.

In Part a (i), candidates were required to outline the causes of market failure (specific to public goods). Better prepared candidates were able to define the characteristics of public goods (non-rivalry and non-excludable). However, the lesser prepared candidates gave examples or stated that they were provided by the government. Some candidates were unable to distinguish between merit and public goods.

In Part (a) (ii), stronger candidates were able to explain why the private sector would not provide these goods (because of the lack of a profit motive). However, many candidates tried to justify the reasons why the government should provide these goods - This may have been due to the way the question was phrased.

Parts (a) (i) and (ii) required candidates to outline the causes of market failure (with respect to externalities). Many of the candidates scored full marks in this section. The few candidates who scored one mark clearly understood the concept of externalities but didn't state whether it was positive or negative.

In Part b (ii) a), many of the candidates were able to identify the shaded area as deadweight loss. However, the identification of the MSC and PMC curves proved challenging. The candidates identified them as supply curves because they did not recognize that the demand curve was the SMB curve. Some candidates did not copy the diagram correctly (omitting labelling axes or the demand curve).

In Part b (ii) b), most candidates started to define externalities again and didn't make reference to the diagram. Candidates who didn't recognize the SMC and PMC curves from previous question were unable to explain that market failure occurs from externalities (because  $SMC > PMC$ ). A number of candidates were unable to identify the socially optimum level ( $Q_2$ ) from the profit maximizing level for the firm ( $Q_1$ ). Candidates were able to identify that when negative externalities exist it cause over production and dead weight loss.

Part b (iii) required candidates to evaluate the measures used by the private sector to correct market failure. Stronger candidates were clearly able to outline the policies used by the private sector to correct market failure. However, many candidates were more familiar with public sector intervention and used this to answer the question instead.

In Parts (c) (i) and (ii), candidates should be able to outline the causes of market failure (due to asymmetric information).

For Part (c) (i), many candidates failed to identify asymmetric information as the issue being described. Many candidates identified the issue as imperfect information / knowledge, adverse selection.

In Part (c) (ii), the situation described in the question was unfamiliar to many candidates. Stronger candidates were able to identify that it was adverse selection. However, weaker candidates could not.

Candidates could not explain how adverse selection led to market failure in this particular situation. Weaker candidates thought market failure meant that the business would shut down. Very few candidates were able to state that the suppliers of good quality cars would be disadvantaged.

## **Recommendations**

More attention placed on the distinction between merit and public goods.

Teach asymmetric information from a product perspective and not just service.

## Question 5

Question 5 tested candidates' knowledge of demand and supply factors. The question was attempted by approximately 18 per cent of the candidates. Only 15 per cent of them scored more than 50 per cent of the marks. One candidate achieved the maximum available mark. Performance on this question was poor. The mean was 6.87 out of 25 (27.48 per cent). The standard deviation was 4.62.

Part (a) focused on the theory of distribution with emphasis on the labour market. Candidates were required to explain the term 'derived demand' and outline factors that influence the demand for labour and the supply of labour. Part (b) required the candidates to outline the least cost rule and calculate the hourly rental price from the rule. They were also required to draw and label a diagram showing marginal revenue product curve and the impact that a decrease in the demand for the good. In Part (c), candidates were required to outline two factors that can account for the disparity in worker productivity.

In Part a (i), most candidates scored full marks for this question. Those who did not were not familiar with the concept. In Parts (a) (ii) a and b), some candidates did not recognize that it was the firm demanding the labour and the workers supplying the labour. Strong candidates were able to outline the factors (wage rate and demand for the good was most common). For Part (a) (ii) b), candidates focused on the supply of labour for a particular occupation — many of them stated education and training as factors influencing the supply of labour. The popular responses were migration, wage rate and population.

An overwhelming majority of candidates were unable to state the least cost rule as required in Part (b) (i). In Part b (ii), some candidates were able to use mathematical analysis to arrive at the answer but not using the least cost rule formula. For Part (b) (iii), few candidates scored full marks. Candidates were more familiar with the MRP curve for labour and not capital. This was seen in the incorrect labelling of the axes. In Part (c), many candidates scored full marks. A few gave factors from industry to industry and not country to country. Many candidates stated rather than outlined the factors.

## **Recommendations**

It is suggested that teachers emphasize the least cost rule and factors affecting productivity.

### **Question 6**

Question 6 tested candidates' knowledge of income inequality, poverty and poverty alleviation. The question was attempted by approximately 82 per cent of the candidates. Forty-five per cent of them scored more than 50 per cent of the maximum available mark. Fifteen candidates achieved the maximum available mark.

Performance was only fair. The mean was 12.08 (48.32 per cent). The standard deviation was 5.46.

The question tested candidates' understanding of poverty and income inequality. In Part (a) (i), candidates were required to distinguish between 'relative and absolute poverty'. While most of the candidates were able to define 'absolute poverty', many candidates were unable to define 'relative poverty'.

The weaker candidates failed to show that 'relative poverty' was a comparison between the individual income and the average income. Additionally, the weaker candidates focused on minimum wage and not average income. Part (a) (iii) was fairly well done by most of the candidates. The main challenge was that a number of candidates identified strategies but were unable to effectively explain how the strategies stated could alleviate poverty.

Less than half of them were able to obtain full marks for this part of the question. For Part (b) (i), a number of candidates were able to obtain full marks for this part of the question. The candidates who performed poorly made the following mistakes:

- Incorrectly labelled the axes. Most failed to label 'percentage income' on the 'Y' axis and 'percentage population' on the 'X' axis.
- Candidates drew two diagrams although the questions asked for one.
- Incorrectly labelled the Lorenz Curve with Gini coefficient 0.33 and 0.61. There was a general lack of understanding of the relationship between the line of equality and the values given. Thus they were unable to place the appropriate values of Country 'A' relative to Country 'B'.
- There was a demonstration of lack of understanding between the 'line of equality' and the 'line of inequality'.

Part (b) (ii) was fairly well done. The stronger candidates were able to explain *income inequality* with the use of examples or by giving the factors that contributed to inequality. However, no candidate

focused on expressing the distribution of income as a percentage of the income to a percentage of the population. Instead responses focused on the coefficient range being between zero and one; where closer to zero being income evenly distributed and closer to one being more unevenly distributed. Part (b) (iii) posed a challenge to most of the candidates. Those who did not draw the graph properly were unable to make specific comparisons. Some of those candidates who drew the graph properly were still unable to utilize the information effectively in order to maximize their scores.

## **Recommendations**

Teacher should employ projects and group assignments as teaching techniques for this section of the syllabus. This section of the syllabus lends itself to real-world applications that students can relate to and find data on. Doing this will not only help to complete the syllabus in the required time but will also help students to understand what is thought to be a very manageable and straight forward topic. Concerning the Lorenz curve, teachers should gather data and have students plot the Lorenz curve and explain what each coordinate means, this should assist students in drawing the correct curve.

### **Paper 032 – Alternative to School-Based Assessment**

The theme of paper 3/2 was the earnings of differential categories of workers and existing wage differentials. Forty-four candidates wrote the examination. Performance on this paper was unsatisfactory. The mean was 20.96 out of 60 (34.94 per cent). The standard deviation was 8.49. The table below shows the means and standard deviations for the three questions.

	Question 1	Question 2	Question 3
Mean	6.37	3.69	10.91
Std. Dev	3.42	2.60	4.92

#### **Question 1**

Part (a) was comprised of five parts. It required candidates to: define the term ‘price ceiling’; state the condition for an effective price ceiling’; define the term ‘price floor’; state the condition for an effective price floor; and identify three problems likely to arise from the imposition of price ceilings and price floors. Part (b) was comprised of two parts. For Part (b) (i), candidates were required to illustrate, in a diagram, the market for unskilled labour, indicate the equilibrium wage rate and equilibrium level of employment. Part (b) (ii) required students to use the same diagram from Part (b) (i) to explain how the market for unskilled labour is affected by the implementation of a minimum wage. They were also required to indicate the minimum wage, the number of workers employed and the number of workers unemployed.

Candidates’ performance on Part (a) was fair. However, for the definitions of price ceiling and price floor, candidates frequently neglected to include the word “legal” as part of the definition. In addition, candidates were unable to identify three problems that arise from implementation of price ceilings and price floors; in most cases only one or two problems were provided. For Part (b), candidates had difficulty labelling the appropriate concepts required in the second part of the question.

## **Recommendations**

Candidates need to improve their understanding of the effects of price controls on the market. This is especially important since the concepts of demand and supply, underpin these critical policies. The focus should include, but not be limited to, the meaning of price ceilings, price floors and the reasons why they are implemented by governments. Candidates should also practice analyzing various situations that require demand and supply diagrams.

### Question 2

Part (a) required candidates to state four conditions which must be satisfied in a perfectly competitive labour market. Part (b) required them explain how equilibrium wages could be accomplished in the long run in a perfectly competitive market with only two jobs which initially pay different wages. Part (c) had three parts. In Part (c) (i), candidates were required to copy and complete a table, by calculating the total variable cost, the total cost and the marginal cost. In Part (c) (ii), candidates were required to describe the type of market in which the firm in the named firm hires labour. Part (c) (iii) had three parts. First, candidates had to determine how many units of output the firm would hire to maximize profits; second, how many units of labour would be hired at the profit maximum; and third, provide an equation to show the relationship between output and labour at the profit maximum.

Candidates performed well on Part (a), frequently providing four conditions. Part (b) created the most challenge as candidates were unable to apply the concepts of a perfectly competitive market to the concept of long-run equilibrium in the labour market. In Part (c) many students were unable to calculate the variable cost which required them to multiply the wage rate by the number of labour units for each output level. Consequently, they calculated the total cost and marginal costs incorrectly. In addition, many candidates were unable to calculate marginal cost.

## **Recommendations**

Candidates are urged to consider the characteristics of each market structure more carefully, particularly those of perfect competition and monopoly, since they are on opposite ends of the spectrum of market structures. They should also spend time applying the characteristics of various market structures of different types of markets. Candidates also need to work on calculation of various streams of revenues (TR, MR, AR) and costs (TC, TVC, MC, ATC, AVC).

### Question 3

Part (a) required candidates to explain the concept of ‘wage differentials’. Part (b) required them to outline three costs of poverty. Part (c) required candidates to identify four factors that contribute to poverty in their country. Part (c) required candidates to state three economic benefits of governmental strategies of poverty alleviation. The final part of the question, Part (d) required candidates to discuss two factors that may account for the differences in wages among various categories of workers, for example, unskilled, clerical, trades, or professionals.

Part (a) was well done by the majority of candidates. In Part (b), candidates had difficulty outlining three costs of poverty. Candidates frequently provided costs that were essentially the same thing. Part (c) was also well done. The only drawback was that candidates were challenged to provide three economic benefits. They typically provided two, or provided benefits that were not necessarily

economic in nature. Candidates' performance in Part (d) fell down because they were unable to fully discuss the factors which they provided.

A major concern is that candidates do not possess the required depth and breadth of knowledge of the material in Module 3. Candidates' answers demonstrate only basic knowledge of the concepts and little in the way of application of these concepts. It is highly recommended that candidates may need to address these shortcomings by seeking guidance from teachers of the subject matter.

### **Paper 031-School-Based Assessment (SBA)**

Generally the projects selected are properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented, analysed and mirrored the applicable economic concepts, principles, methods and theories for the unit under investigation.

#### **Strengths**

- Students demonstrated good knowledge of the theories, principles and concepts necessary to present good projects.
- The topics chosen were appropriate as they were in agreement with the criteria (mark scheme) outlined in the syllabus.
- The economic concepts used were related to the topic selected; they were clear, precise and significant.
- Economic theories were appropriately used.
- There was evidence of marked improvement in the analysis and the interpretation as the candidates showed accurate calculation of economic data and relatedness to variables.
- Some candidates showed that they were able to well articulate and organize their evidences which showed good problem solving skills.
- Candidates presented theoretically correct judgments based on the findings of their research topics.
- Some candidates demonstrated good citations and referencing of the data sources from which information was garnered.
- Excellent use of language and reporting skills were evident throughout the report.

#### **Weaknesses**

Even though there are improvements in the general submissions of the IAs, there is still need for improvement in the following areas:

- Communication – Bibliography/Reference should be written with an international standard; citation needs improving – all citation used in the project must appear in the bibliography; internet citation should also be written in the bibliography; interview source should be written in bibliography.
- Wikipedia is not a credible source to cite. Example: [www.wikipedia.com](http://www.wikipedia.com); so too is [www.ask.com](http://www.ask.com)
- Some candidates are still using sociology theories and concepts as part of the economic data source; they need to use social economics aspects to validate their research.
- Candidates should abstain from using social media language and jargons in their internal assessment projects. Example: use the letter “u” in place of the word “you”.
- It was observed that some students were still struggling to formulate appropriate topics for their research. Example: “Barbara’s Nail Salon”; “Stylux”; “Diana’s Dinner Mint”; “An investigation and analysis into the Economic System of Raj Wrecking Service”.
- Some candidates still showed weakness in formulating their objectives. Objectives should be specific to topics under investigation,
- Sometimes mark awarded by teachers were not consistent with the marking criteria set out in the syllabus, as a result, marks awarded appeared to be inconsistent and subjective.

- A large number of reports were too similar.
- Methodology should speak specifically to design of the instruments and validation of the reasons why they are suitable for the specific research— explain population size, sample size, instruments, as well as limitations.
- Recommendation should be workable solutions to the problems presented.
- Some candidates are still having challenges in linking the judgment and recommendations to the topics being researched and the findings.

### **Recommendation**

It is recommended candidates do their individual presentation of data although they collaborated in the gathering of the data. Example: Reports should not have the same words and exact data variables and same questionnaires, same sample. Teachers so liaise with other teachers who prove to be strong in the SBA component of the assessment and engage in information sharing. This includes peering into exceptional papers, average papers and poorly done papers to ascertain what the standard is, so as to aid them in guiding the students as well as marking the SBA.

## **UNIT 2 – MACROECONOMICS**

### **Paper 01 – Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension, application and interpretation of information. The mean mark was 64.39 out of 90 (71.55). The standard deviation was 14.54. Eighty-nine per cent of the candidates scored at least 50 per cent of the maximum available marks. Eighteen candidates achieved the maximum mark.

### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programs. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks. Performance on the paper was less than satisfactory. The mean mark was 32.72 out of 75 (44.96 per cent). The standard deviation was 16.9.

#### **Question 1**

Question 1 tested candidates' knowledge of national income accounting. The question was attempted by approximately 70 per cent of the candidates, 63 per cent of them scored more than 50 per cent of the available marks. Fifty candidates achieved the maximum available mark. Performance on this question was good. The mean was 14.76 out of 25(59.04 per cent). The standard deviation was 6.16.

Part (a) required the candidates to define the term 'intermediate good'. Part (b) (i) required the candidate to explain why intermediate goods are not counted in the calculation of GDP and Part (b) (ii) to define the term 'value added'. Part (c) tested the candidates' ability to state the formula for calculating GDP using the expenditure approach and to calculate the GDP using the expenditure

approach. This section also required candidates to explain the income approach for calculating GDP and calculate the GDP using the income approach. The final part in the question, Part (d) required the candidates to describe three types of ‘leakages’ from the circular flow of an economy.

Candidates were unable to accurately define the term “intermediate good”. They confused the definition with that of the term “work in progress.” Most candidates were able to identify double counting as a reason for not adding intermediate goods in the calculation of GDP but several of their explanations were inaccurate since they alluded to secondhand goods. Most candidates scored full marks in Part (c) (i). In Part (c) (ii), most candidates were able to define the income approach to GDP as the summation of the rewards of the factors of production, however, some candidates failed to include “rewards in the factors of production”. In Part (d), most candidates were able to identify the leakages but were unable to explain how they impacted the circular flow through the reduction of aggregate demand.

### **Recommendation**

Teachers are encouraged to stress the difference between intermediate goods among work in progress and second hand goods. Teachers are also encouraged to show how linkages impacted the circular flow through the reduction of aggregate demand.

### **Question 2**

Question 2 tested candidates’ knowledge of national investment and unemployment under the classical model. The question was attempted by approximately 30 per cent of the candidates, 24 per cent of them scored more than 50 per cent of the available marks. The highest mark on this paper was 24 out of 25, this was achieved by one candidate. Performance on this question was less than satisfactory. The mean was 9 out of 25(36 per cent). The standard deviation was 5.

Part (a) required candidates to define *macroeconomic variables investment and interest rate*. Part (b) required candidates to distinguish between savings and consumption as well as explain the term ‘marginal propensity to consume’ with the use of an example. Part (c) required candidates to calculate the equilibrium level of income and state the multiplier of the economy from a given aggregate expenditure for an economy. Part (d) required candidates to explain durability, the accelerator, and irregularity of innovation as determinants of the variability of investment.

For Part (a) (i), candidates used the accounting definition of investment in lieu of the economic definition causing them to lose valuable marks. Part (ii) was most widely known as candidates knew at least one definition of interest rate. Most candidates were also able to adequately distinguish between savings and consumption in Part (b), however, not all candidates fully understood the term ‘MPC’ and were unable to apply the term by use of proper example. Many candidates did not show an understand of ‘MPC’ as a percentage; they were under the impression that the change in consumption was a change in the amount of units of a good consumed as opposed to the change in the amount of additional income consumed. For Part (c), candidates in most cases, had the formula but did not equate it to ‘Y’ as such, were mathematically deficient in completing the calculation of equilibrium GDP. Additionally, candidates for the most part did well in stating the multiplier of the economy but some were unable to score any marks because they simply did not know the multiplier. Part (d) (ii) showed that candidates did not know the accelerator theory, however, they did attempt to use whatever knowledge they had in other areas to answer the question. Predominantly, candidates

did not know the concepts and as such, lacked the ability to make the link between the variables identified and the changes in investment.

### **Recommendation**

Candidates should be instructed that there is a difference in the use of terms and concepts in the economic and accounting fields.

### Question 3

Question 3 tested candidates' knowledge of monetary theory and policy. The question was attempted by approximately 70 per cent of the candidates, 31 per cent of them scored more than 50 per cent of the available marks. One candidate achieved the maximum available mark. Performance on this question was less than satisfactory. The mean was 9.69 out of 25(38.76 per cent). The standard deviation was 6.16.

Part (a) required candidates to define the velocity of money, currency substitution and monetary transmission mechanism. Part (b) required candidates to outline three type of demand for money. Part (c) required candidates to assess how the Central Bank can use monetary policy to positively impact aggregate demand. Part (d) required candidates to discuss two reasons why the Central Bank's policy options to combat inflation may achieve only limited success.

Most candidates stated that velocity of money was the number of times money changed hands, failing to specify that it is the number of times a single unit of currency (a dollar) changes hands within a given period of time. In relation to currency substitution, most candidates defined it as the exchange of one currency for another, instead of stating that it was the abandonment or replacement of the local currency in preference for a foreign currency due to loss of confidence in the local currency. Monetary transmission mechanism proved most challenging for candidates. For those who attempted, it, they stated that it was the transfer of money from one entity to another. Candidates failed to show the cause and effect between monetary variables and real variables (real GDP, real National Income, unemployment, inflation).

For Part (b) candidates performed very well on this section, however, some candidates failed to adequately explain the speculative demand for money as being dependent on the movement of bond prices/interest rates. Some candidates failed to logically show how expansionary monetary policy would result in an increase in aggregate demand. Candidates incorrectly used expansionary fiscal policy instead of expansionary monetary policy. Candidates also found Part (d) to be very challenging as there was rarely any logical explanation on how endogenous or exogenous factors can minimize the effectiveness of the Central Bank's policy options to combat inflation resulting in limited success.

### **Recommendation**

Teachers should pay keen attention to defining macroeconomic terms and showing cause and effect between macroeconomic variables. Teachers are also advised to use real-life situations to disseminate the tools, uses of and limitations of macroeconomic policy options.

#### **Question 4**

Question 4 tested candidates' knowledge of fiscal policy and public debt. The question was attempted by approximately 30 per cent of the candidates only 18 per cent of them scored more than 50 per cent of the available marks. The highest mark was 24 out of 25; this was achieved by 4 candidates. Performance on this question was poor than satisfactory. The mean was 6.58 out of 25(26.32 per cent). The standard deviation was 6.18.

Part (a) consisted of three subsections which required candidates to define the 'balance budget multiplier', explain the term 'automatic stabilizer', and provide two examples of automatic stabilizers. Part (b) required candidates to explain how government borrowing to finance fiscal deficit impacts negatively on inflation, domestic investment and domestic interest rates. Part (c) consisted of two subsections which required candidates to define the term 'fractional reserve banking system' and describe how the fractional reserve banking system is used in the money creation process.

Some candidates were unable to properly define the terms 'balance budget multiplier'. They defined 'balanced budget' instead. Likewise, most candidates were unable to give a comprehensive explanation of automatic stabilizer; they failed to connect it to fluctuations in the economy. However, most candidates were able to identify the two examples of automatic stabilizers. The majority of the candidates were unable to explain the negative impact of government borrowing to finance fiscal deficit on inflation, domestic investment, and domestic interest rates. Many of the candidates explained how the government repaying the loan will negatively impact on the above variables instead. This part of the question proved to be the most challenging for the candidates. Part (c) was widely known. Most students were able to define the term 'fractional banking system'; however, they did not connect required reserves to the Central Bank. In addition, the majority of the candidates were able to use an example to illustrate how commercial banks create money. The majority of the candidates scored full marks in this part of the question.

#### **Recommendation**

Teachers should make a clear distinction between the balanced budget and the balanced budget multiplier. In addition to defining automatic stabilizers as built-in or non-discretionary fiscal policies, teachers should ensure that students are aware of their purpose as policies that automatically reduce fluctuations in the economy. Finally, teachers can assist students in improving their responses by giving them more practice in answering questions involving application and analysis of theory. Also, it is important to note that most Central Banks accommodate the education of students in the various policy tools used by the central bank and as such will welcome educational field trips to the bank so that students can get a firsthand and practical exposure to the concepts.

#### **Question 5**

Question 5 tested candidates' knowledge of growth and sustainable development. The question was attempted by approximately 77 per cent of the candidates, 46 per cent of them scored more than 50 per cent of the available marks. Six candidates achieved the maximum available mark. Performance on this question was only fair. The mean was 11.79 out of 25(47.16 per cent). The standard deviation was 6.08.

Part (a) required candidates to differentiate between ‘economic growth’ and ‘economic development’. They were expected to clearly state what economic development is and what economic growth is and then show distinction. Part (b) required candidates to outline three determinants of economic growth.

Part (c) required candidates to explain the concept of ‘human development index’ while Part (d), required candidates to discuss three ways in which policy makers can enhance the well-being of the society.

The majority of the candidates, had some basic understanding of the concepts of ‘economic growth’ and ‘economic development’ and were able to score at least two marks for correctly defining economic development as an improvement in the standard of living and economic growth as the increase in output. Many candidates demonstrated that economic growth means increase in output but did not specify that economic growth was an increase in REAL GDP and were penalized if only “increase in GDP” was given. Candidates who realized that growth is quantitative and development is qualitative along with correct definitions were awarded the full 4 marks. Part (b) was well done; the majority of candidates scored full marks. Those who scored less than full marks listed as opposed to outlining the determinants. In addition, some candidates did not know the determinants since they wrote GDP, GNP or National Income as their response.

In Part (c), candidates correctly stated that the ‘human development index’ is a measure/indicator of ‘human development’ or a country’s ‘standard of living’. While the majority named at least two of its components, most did not state its use as a means of ranking/rating a country’s human development. In Part (d), the responses showed that students understood the concept of *well-being*. They were able to discuss the ways in which the policies must contribute to improving people’s life but did not articulate three distinct policies. For example, candidates discussed one policy three times or combined several policies as one. Because candidates did not clearly identify the three policies that were being discussed in most instances, it was difficult to decipher their responses. In essence, candidates did not properly structure their responses to this part of the question. Common responses included government spending and fiscal policy which are not specific policies.

### **Recommendation**

The distinction between growth and development must be clearly highlighted. Teachers are advised to give students a more indebt exposure to the determinants of growth as a part of the topic. Also, in addition to explaining the factors, students should be able to explain how these factors influence economic growth. Teachers are urged to encourage students to research UNDP’s website for Human Development Index including the rankings. This will foster students’ research skills as well as expose them to real world indices and interpretations which permit a better grasp and appreciation of the concept. Students should be engaged in discussions regarding real scenarios especially where the topic is dynamic like policy issues and development. Students must be told to structure their responses properly and logically so that reading is meaningful. Features (e.g., new paragraphs) that show distinction among points, must be used. Candidates must use the marks allotted to question as a guide to the depth of the response. It is recommended that candidates clearly number their responses, skip a line between different parts of the question and follow the prompts given. Teachers need to focus on the economic perspective of economic integration rather than the social and cultural.

**Question 6**

Question 6 tested candidates' knowledge of balance of payments and exchange rates. The question was attempted by approximately 23 per cent of the candidates, 52 per cent of them scored more than 50 per cent of the available marks. One candidate achieved the maximum available mark. Performance on this question was fair. The mean was 12.60 out of 25(50.40 per cent). The standard deviation was 5.29.

Part (a) required candidates to distinguish between the nominal and real exchange rates; convert the nominal exchange rate to the real exchange rate and state the effect of depreciation in the real exchange rate on the price of domestic goods relative to foreign goods, domestic imports and domestic exports. Part (b) required candidates to use a diagram to interpret the effect of increased imports into the domestic country on the demand for foreign exchange and the price of the domestic currency. Part (c) required candidates to discuss two advantages and one disadvantage of globalization on developing countries.

Parts (a) (i) and (ii) were the areas with which candidates were least familiar. In Part (a) (i), candidates tried to apply their knowledge of real versus nominal values from other topics to exchange rates. In the main, very few candidates were able to accurately define nominal and real exchange rates. For Part (a) (ii), only a few candidates scored marks. Candidates were unable to perform the calculations necessary to make the conversion from the nominal to the real exchange rate. Part (a) (iii) was the most widely known area of the question and most students were able to score at least 2 out of the 3 available marks. In Part (b), candidates were able, for the most part, to accurately depict the effect of the increased demand for imported cars. However, when interpreting the changes reflected in the diagram, many students mistakenly applied the increased price to the TT dollar rather than to the foreign currency or the nominal exchange rate. Few candidates were able to associate the increased price with the depreciation of the domestic currency. Part (c) proved to be the most challenging area. Though candidates seemed to have a very general knowledge of the concept of globalization, a significant proportion of them were unable to pinpoint two distinct advantages associated with the phenomenon. Those who were able to do so still fell short in many instances because they failed to make the link between the stated advantage and globalization. On the other hand, some candidates who did make the link failed to show how or why the particular point would act as an advantage to the developing economy. Candidates seemed to think that it was sufficient to say 'globalization leads to ...' without saying how it leads to ..."

**Recommendation**

Teachers are advised to emphasize to students the definitions of nominal and real exchange rates and to clearly distinguish between them. In addition, teachers are encouraged to reiterate how to convert a nominal exchange rate to a real exchange rate. In relation to the concept of globalization, more attention should be directed in helping students to move from a vague definition of globalization to explaining its advantages and disadvantages, and the process by which these advantages and disadvantages can occur.

### **Paper 032 – Alternative to School-Based Assessment (SBA)**

The theme of Paper 032 was the impact of increasing levels of housing and other development projects on the environment. Twenty-four candidates wrote this paper. Performance was less than satisfactory. The mean was 20.96 out of 60 (34.93 per cent). The standard deviation was 13.46. The table below shows the means and standard deviations for the three questions.

	Question 1	Question 2	Question 3
Mean	8.58	4.83	7.54
Std. Dev	5.30	5.01	5.49

#### **Question 1**

Part (a) was divided into three subparts. In Part (a) (i), candidates were asked to differentiate between GDP and GNP. In part (ii) candidates had to identify three approaches used to measure GDP. In part (iii) candidates were required to state three reasons why GDP is not considered a complete measure of economic well-being. Part (b) was divided into two subparts. Part (b) (i) required candidates to define the term *standard of living* and Part (b) (ii) required them to discuss two ways in which an increase in GDP may negatively impact a country's standard of living.

In Part (a) (i) candidates frequently defined the two concepts but did not differentiate between them. In Part (a) (ii), candidates remembered the income and expenditure approaches, but forgot the value-added approach. Part (a) (iii) was done reasonably well. In Part (b) (i), candidates partially defined the term standard of living, losing 1 mark in the process. In Part b (ii), candidates had some difficulty in identifying ways in which increases in GDP can impact negatively on the standard of living. In addition, candidates did not score high because they were unable to provide a full discussion of the issue.

#### **Recommendations**

Students need to be aware of the difference between *define* and *differentiate*, as well as the value-added approach to measuring of GDP. Candidates need to expand their understanding of the incompleteness of GDP as a measurement of economic well-being, and also the possible negative impacts from increases GDP.

#### **Question 2**

Part (a) had three parts. It required candidates to define: fiscal policy, monetary policy, and economic development. In Part (b), candidates were required to explain two ways in which government strategies to protect the environment can contribute to a budget deficit. Part (c) required candidates to discuss one way in which monetary policy could contribute to negative impacts on the environment from rapid expansion in housing and other development projects, and one way in which fiscal policy could be used to solve the problem.

Candidates struggled with the definitions in Part (a). In Part (b), candidates were able to fully explain one way in which government attempts at environmental protection can increase the budget deficit. In many instances, they provided examples, rather than explanations. In Part (c), candidates were unclear as to how monetary policy could contribute to the problem identified. The answers provided

made little connection with the theory. Candidates performed better with how fiscal policy could help to solve the problem.

### **Recommendations**

Candidates' responses demonstrate weaknesses in relation to the definitions of monetary and fiscal policy, along specific policies and their application to various problems. They are advised to read local and international newspapers and magazines, for example the Wall Street Journal and The Economist, for material that is easily digestible and provides excellent examples of monetary and fiscal policies and their implementation.

#### **Question 3**

Part (a) required candidates to define economic growth and the human development index (HDI) in Part (i) and to identify three main variables used in calculating the HDI in Part (ii). Part (b) required candidates to explain the relationship between 'per capita income' and 'environmental quality'. In Part (c), candidates were required to define the term *balance of payments* (BOP) in the first part and to discuss two ways in which environmental degradation can negatively impact the BOP of a country for which tourism is the main driver of income.

Some candidates were able to define economic growth and HDI successfully; however the majority of them lost a mark because they neglected to provide a key component of the definition. In many instances, candidates were unable to provide the three components of the HDI; many mentioned literacy/education and longevity/health, but omitted per capita income. Candidates had great difficulty in explaining the relationship between per capita income and environmental quality. Candidates were able to define BOP, but were unable to provide the link between environmental degradation and the BOP.

Candidates' knowledge of module three is weak. The answers provided were peripheral to the questions asked. The connection between various concepts is non-existent.

### **Recommendation**

It is recommended that greater emphasis be placed on learning the material in this module.

### **Paper 031 – School-Based Assessment (SBA)**

Generally the projects selected are properly formulated and the objectives were related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented, analysed and mirrored the applicable economic concepts, principles, methods and theories for the unit under investigation.

## **Strengths**

- Students demonstrated good knowledge of the theories, principles and concepts necessary to present good projects.
- The topic chosen were appropriate as they were in agreement with the criteria (mark scheme) outlined in the syllabus.
- The economic concepts used were related to the topic selected; they were clear, precise and significant.
- Economic theories were appropriately used.
- There was evidence of marked improvement in the analysis and the interpretation as the candidates showed accurate calculation of economic data and relatedness to variables.
- Some candidates showed that they were able to well articulate and organize their evidence which showed good problem solving skills.
- Candidates presented theoretically correct judgments based on the findings of their research topics.
- Some candidates demonstrated good citations and referencing of the data sources from which information was garnered.
- Excellent use of language and reporting skills were evident throughout the report.

## **Weaknesses**

- Some candidates used macroeconomics topics, aims and objectives to investigate and present microeconomic problem solving reports.
- Some candidates use microeconomic topics, aims and objectives to investigate and present macroeconomic problem solving reports.
- It was observed that some students were still struggling to formulate appropriate topics for their research. Example: *“To see and explain how a recession of inflation is the cause of the growing deficit in Balance of Payment”*.
- The topic chosen for the research should be “time specific” and should be confined to a specific region or country. Example: Inflation in Jamaica for the period 2008 to 2010.
- Secondary data source is not used to support evidence of problem solving. The information is used in a general sense with no concrete evidence.
- Some candidates were unable to correctly analyse, synthesis, and apply secondary data to economic topic, concept and theories being investigated.
- Recommendation should be workable solutions to the problems presented. Some candidates are still having challenges linking the judgment and recommendations to the topics being researched and the findings.
- Some candidates still showed weaknesses in writing the methodology, which should show specifically the design of the instruments and validation of the reasons why they are appropriate for the specific research— explain population size, sample size, instruments, as well as limitations.

## **Recommendations**

- Some teachers need to adhere to the marking criteria set out in the syllabus as the marks appear to be inconsistent and subjective.
- Students should be guided in formulating topics which are appropriate to the unit to be examined.

- Students should be encouraged to show limitations encountered in using the instruments selected to carry out the research and the methodology employed in the report.
- Methodology should speak specifically to design instruments and validate the reasons why they are suitable for the specific research.

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION®**

**MAY/JUNE 2015**

**ECONOMICS**

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## GENERAL COMMENTS

The CAPE Economics examinations consist of two units — each is examined by the following papers:

Paper 01 – Multiple Choice

Paper 02 – Essay

Paper 031 – School-Based Assessment (SBA) (done by school candidates)

Paper 032 – Alternative to School-Based Assessment (done by private candidates)

Unit 1 dealt with microeconomic theories, concepts and issues. Performance on Unit 1 was fairly good. The mean mark was 170.06 out of 300 (56.69 per cent). The standard deviation was 45.46.

Unit 1 was divided into three modules:

Module 1 – Methodology of Economics and the Analysis of Demand and Supply

Module 2 – Market Structure, Market Failure and Intervention

Module 3 – Distribution Theory and Application of Recent Theoretical Developments

Module 1 tested candidates' basic understanding of the theory of consumer demand, which included the concept of utility and consumer surplus and the law of diminishing marginal utility. The module also examined market equilibrium, specifically the calculation of quality demanded and supplied and the determination of equilibrium price and quantity traded. The concepts tested also included drawing and assessing the impact of a tax on market equilibrium. Performance on this module was good. The mean mark was 62.80 out of 100. The standard deviation was 18.13

Module 2 tested candidates' understanding of market failure, pare to efficiency, production efficiency, along with market interventions and measures to correct market failure, also with public and merit goods. This module also tested candidates' knowledge of the concept of income inequality, measures that can be used by the government to reduce income inequality and candidates' understanding of poverty.

Performance on this module was fair. The mean mark was 51.43 out of 100. The standard deviation was 17.87.

Module 3 tested concepts such as wage differentials and labour market imperfections, geographical and occupational mobility. It also examined candidates' knowledge of the effect of a monopoly trade union in determining wages and the level of employment under perfect competition.

Performance on this module was fair. The mean mark was 51.63 out of 100. The standard deviation was 17.38.

Unit 2 dealt with macroeconomic theories, concepts and issues. Many candidates demonstrated a good grasp of the subject matter. Overall, performance was good. The mean for Unit 2 was 171.52 out of 300 (57.17 per cent). The standard deviation was 41.00.

Unit 2 was divided into three modules:

Module 1 – Models of the Macroeconomy

Module 2 – Macroeconomic Problems and Policies

Module 3 – Growth, Sustainable Development and Global Relations

Module 1 required candidates to demonstrate knowledge and understanding of basic macroeconomic concepts, national income, the Keynesian Consumption theory and the Classical Model. Performance was good. The mean mark was 53.18 out of 100. The standard deviation was 17.25.

Module 2 tested candidates' knowledge of monetary theory and policy, and fiscal policy. Performance was fairly good. The mean mark was 56.08 out of 100. The standard deviation was 16.38.

Module 3 dealt with growth and development, international trade, exchange rate and foreign direct investments. Performance on the module was good. The mean mark was 56.61 out of 100. The standard deviation was 17.29.

## **DETAILED COMMENTS**

### **UNIT 1 – MICROECONOMICS**

#### **Paper 01– Multiple Choice**

Paper 01 consisted of 45 items, 15 on each module, spanning knowledge, comprehension, application and interpretation of information. The mean mark was 59.62 out of 90 (66.25 per cent). The standard deviation was 14.70. Eighty-two per cent of the candidates scored at least 50 per cent of the maximum available mark. Three candidates achieved the maximum mark.

#### **Paper 02 – Essays**

Paper 02 required candidates to employ higher-level competencies to analyse economic issues, apply economic theories in solving problems and evaluate economic policies and programmes. Candidates were required to answer one of two questions in each of the three modules. Each question was worth 25 marks. Performance on the paper was less than satisfactory. The mean mark was 66.01 out of 150 (44.01 per cent). The standard deviation was 26.93. Thirty-eight per cent of the candidates scored at least 50 per cent of the maximum available mark. The highest mark was 146 out of 150. This was achieved by one candidate.

#### **Question 1**

This question was attempted by approximately 75 per cent of the candidates, 58 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 19.79 out of 25 (55.16 per cent). The standard deviation was 5.16. Two candidates achieved the maximum available mark.

Part (a) (i) required that candidates fill in a table with total utility and marginal utility figures. The majority of candidates did well in this section of the question which tested their ability to calculate missing marginal utility figures given total utility figures and vice versa. Candidates who struggled were unable to transpose the formulae for marginal utility and were apparently, unaware of the relationship between marginal utility and total utility.

Part (a) (ii) required candidates to define the terms *total utility*, *marginal utility* and *law of diminishing marginal utility*. The definitions given for total utility by most candidates was satisfactory. Candidates who failed to maximize their scores for this question failed to use the words *total*, *all* or *complete* in their definitions which rendered these definitions incomplete. They instead used phrases such as 'some of' or 'maximum' satisfaction. Candidates also erroneously referred to the total as the 'satisfaction gained from purchasing rather than consuming a good'.

Many candidates did not define marginal utility as the added or extra satisfaction gained from consuming an additional unit of a good. Instead candidates gave a partial answers such as 'satisfaction gained'. In defining any marginal concept, emphasis must be placed on the *change in* or addition to or subtraction of the extra unit. Candidates are also advised that the writing of a formula is not a definition and does not therefore merit a full score.

Candidates demonstrated a general understanding of the concept but struggled with clearly defining the law. As a result, many candidates used examples to define the concept. Whilst this is acceptable when asked to explain a concept, this cannot suffice as the question specifically required a definition. A few candidates also confused the law of diminishing marginal utility with the law of diminishing marginal productivity.

Part (a) (iii) required candidates to identify the point of maximum total satisfaction and the point when diminishing returns set in. This part of the question was fairly well done. Stronger candidates used the table to correctly identify when satisfaction from the consumption of chocolate bars began to decline which was after the first chocolate bar or at the second chocolate bar. Had candidates known that the point at which marginal utility is equal to zero is where total utility is maximized, they would have arrived at the correct answer of 4 units. However, this knowledge was lacking.

In Parts b (i), (ii) and (iii), candidates were required to define *consumer surplus*; draw a demand curve based on the information given, and shade and label the area that represented total consumer surplus.

Part (b) (i), was well done; candidates who failed to score full marks did not define consumer surplus as *the excess or benefit gained by the consumer or the difference between the actual price paid and the price they were willing to pay*.

Part (b) (ii) was poorly done and only a few candidates were able to score the maximum mark for this question. Candidates did not use the data provided to accurately plot the two set of coordinates on the demand curve. Incomplete labelling of the demand curve and the axes played a major part in candidates not scoring full marks. Candidates are encouraged to pay attention to the labelling of diagrams and to accurately plot points from given data.

Many candidates were unable to score the full marks for Part (b) (iii). This was partly as a result of errors made in the previous question especially with regard to the incorrect plotting of the coordinates. In addition, some candidates only identified the area representing consumer surplus and failed to shade the area. Some candidates only shaded a portion of the consumer surplus area rather than the entire area that lies above the price the individual pays (\$2.50) and below the highest price that the person is willing to pay (\$5.00). As a result, they were unable to maximize their score.

In Part (c), candidates were required to use marginal utility theory to explain the shape of the demand curve. Performance on this section of the question was the least satisfactory. Very few candidates were able to gain maximum marks for this question. The majority of candidates scored a maximum of two out of four marks for this section. Many candidates cited the law of diminishing marginal utility and the law of demand and correctly stated that marginal utility falls but were unable to use the marginal utility theory to justify the shape of the demand curve. The points were, therefore, disjointed and displayed a lack of coherence. A comprehensive answer would have stated that *the demand curve is the marginal utility curve and that the demand curve slopes downwards because of the law of diminishing marginal utility or declining marginal utility. This indicates that an individual is willing to pay a high price for the first unit of a good because the first unit gives more satisfaction than subsequent units*. Therefore, with less utility gained from the consumption of additional units, the rational consumer will only purchase those units if the price is dropped. Hence there is an inverse relationship between the price of the good and the quantity demanded.

## **Recommendations**

Teachers are encouraged to emphasize the relationship between total and marginal utility and to have students practise questions similar to Question 1 (a) (i). Teachers should note that their students will not maximize their marks if they do not state a comprehensive definition of concepts; many students do, however, demonstrate that they understand the concepts. It is recommended that teachers teach concepts using examples first and then have students develop a definition from their understanding of the concept. This type of exercise can prove useful as it has been observed that students attempt such

knowledge components of the examination from rote and as such do not include key terms that are necessary in the definition, when their memory fails.

The marginal utility theory is an area on the syllabus that seems not to have been given much attention by teachers, hence the poor performance. Students were able to define terms, however, they were not able to develop comprehensive explanations for the shape of the demand curve using the theory. It is our suggestion that more emphasis be placed on analysis and synthesis of the basic concepts so that students can gain the maximum mark.

### **Question 2**

This question was attempted by approximately 25 per cent of the candidates, 53 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 19.79 out of 25 (55.16 per cent). The standard deviation was 5.19. The highest mark of 24 out of 25 was achieved by nine candidates.

Part (a) (i) required candidates to define the term *market equilibrium*. This was satisfactorily done. However, there were a few definitions that were not explicit. Part (a) (ii) required candidates to fill in a table with demand and supply quantities using demand and supply equations. This was fairly well done. Candidates were able to substitute the price units correctly so as to obtain demand and supply quantities.

In Part (a) (iii), candidates were expected to draw a diagram of the demand and supply curves using data that were calculated in Part (a) (ii). When labelling the axes some candidates put price on the horizontal axis and quantity on the vertical axis. Some candidates did not use the data from the table to plot the curves.

In Part (a) (iv), candidates were required to identify the type of government intervention described in the question. Some candidates gave general answers such as ‘price control’ and others confused price ceilings with floors.

In Parts (b) and (c), candidates were required to illustrate the imposition of a specific tax on the diagram drawn in the previous parts of question, and to analyse the total welfare effect of the tax. This section was not well done. Candidates failed to relate responses to the question or data from previous parts. Many wrote generally about the changes in demand and supply and did not link their response to the situation given in the question, particularly in Part b (i), there was a lack of knowledge about the effects of a specific tax on a product in the market. Even though the question specifically stated *a specific tax levied on the producer*, some candidates were unable to determine that the imposition of a tax would have resulted in a shift of the supply and not the demand curve. Many candidates were not able to identify the new equilibrium price and quantity. However, most were able to show the shift in the supply curve. Candidates failed to clearly show that the tax was shared between consumer and producer and that there was a tax wedge. They also failed to label the tax revenue area.

### **Recommendations**

It is recommended that students practise questions that involve calculations in a table format.

Teachers should provide more research assignments and classroom presentations. Additionally, teachers should engage classes in discussions which will help in the analysis of some answers. For example, in Part b (ii), some students did not analyse but simply gave definitions for consumer surplus, producer surplus, and deadweight loss. Teachers should test all levels of Bloom’s taxonomy. They should practise giving students more holistic questions and not based on the syllabus objectives only. There is need to provide students with more practice in order for them to develop the ability to relate the theories to experience.

### Question 3

This question was attempted by approximately 27 per cent of the candidates, 25 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 9.72 out of 25 (38.88 per cent). The standard deviation was 5.59. One candidate achieved the maximum available mark.

In Part (a) (i), candidates were required to define *price discrimination* and outline one form of price discrimination. Part (a) (i) a was well answered for the most part. However, some candidates only gave examples of price discrimination but did not classify it as first, second or third degree.

Part (a) (ii) tested candidates' ability to outline two conditions necessary for price discrimination. It was apparent that most candidates lacked the basic knowledge needed to answer this question, and the few who had basic knowledge were unable to apply same. Most candidates were able to identify the conditions but had trouble explaining them. For example, they identified market power but failed to expound.

Part (a) (iii) required candidates to explain one reason why firms apply price discrimination. Many candidates demonstrated a lack of the knowledge needed to answer this question. Candidates focused on the consumer instead of the firm. Most candidates were able to identify profit maximization as a reason for price discrimination but were unable to fully explain same.

Part (b) required candidates to list two types of market structures that exist in CARICOM and give an example of each. Candidates performed well on this part of the question. Most were able to earn the full four marks. There were a few candidates, however, who gave 'economic systems' as their answer instead of *market structure*. Some candidates were able to identify the different market structures, however some gave incorrect examples

Parts (c) (i) and (ii) tested candidates' ability to illustrate profit maximization for a monopoly on a diagram, and to analyse why a perfectly competitive firm is more efficient than a monopoly.

In Part (c) (i), in particular, candidates' performance was fair. Some candidates were awarded four or more out of the six marks for the diagram. Marks were lost due to incorrect labelling or displacement of the marginal cost curve. Some candidates were not able to identify the profit maximizing output, that is, where  $MR = MC$ . Also, some did not extend the dotted line from the equilibrium point ( $MR = MC$ ) up to the demand/average revenue curve to identify the price for a monopolist. Instead, they assumed that price was where  $MR = MC$ . A number of candidates drew graphs that were related to a perfectly competitive firm rather than graphs related to the monopolist firm. Market equilibrium curves were also erroneously used.

Part (c) (ii) was poorly done; candidates gave the characteristics of the market structures instead of explaining why the market structures were efficient or inefficient. It was evident that the necessary knowledge to answer the question was lacking; therefore, candidates were unable to achieve full marks. Some candidates were unable to explain why perfectly competitive markets were more efficient than monopolies. Notably, those who identified perfectly competitive firms to be allocatively and productively efficient were not able to further explain these terms and how they relate to each market structure.

### **Recommendations**

Teachers should ensure that all aspects of the syllabus are covered in their entirety. A lack of knowledge was evident in students' responses to Question 3(a) which focused on price discrimination. Most students demonstrated that they were not fully comfortable or knowledgeable about price discrimination especially as it relates to firms, the conditions necessary for price discrimination and the reasons for price discrimination.

It is also advised that more emphasis be placed on distinguishing the market structures in terms of the inefficiency with which the resources are allocated. Students should be discouraged from using the characteristics to attempt to discuss efficiency and the market structure. Teachers should also stress the meaning of key verbs such as *state*, *define*, *explain*, *outline* etcetera. Students should pay more attention to the instructional words that are used in the question. For example, some students were just stating their points rather than explaining or analysing. Students should be discouraged from using abbreviations, for example, AUPA, JPS etc. Students are encouraged to refrain from selective studying; they should revise all content areas of the syllabus, as this help them to be more conversant with the material thereby earning more marks.

#### **Question 4**

This question was attempted by approximately 73 per cent of the candidates, 27 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 9.96 out of 25 (39.84 per cent). The standard deviation was 5.31. The highest mark of 24 out of 25 was achieved by three candidates.

Part (a) required candidates to define *market failure*, *pareto efficiency* and *productive efficiency*. Most candidates were able to define *market failure*. Candidates mentioned the lack of efficiency but failed to further explain under or overproduction, others referred to the disequilibrium between demand and supply. However, they did not state the *inability* of the market to achieve equilibrium, as was expected. Most were able to correctly define the term *pareto efficiency*, although some candidates confused *pareto efficiency* with *productive efficiency*. Most candidates were able to define the term *productive efficiency* although some candidates' responses were incomplete. Some candidates mentioned 'large amount of output' instead of *maximum output*. Others failed to further mention that goods are produced at the *least possible cost*.

Part (b) (i) required candidates to state three reasons why the competition or regulatory authority may prevent a merger of two major companies in an industry. This section was poorly done by candidates, as many of them focused on the effects on others firms in the industry instead of the impact on the consumer, for example, 'firms losing profits and closing down', etc. Although, candidates were able to state why a merger may be prevented they were not able to explain.

Part (b) (ii) tested candidates' ability to explain how public goods and merit goods contribute to market failure and state an example. Most candidates were able to define the term *public good* and provide an example. Whereas some interchanged the definition for *merit good* with that of *public good*, some candidates confused the examples of *merit goods* with those of *public goods*, while others were unable to state how *public goods* caused market failure. Candidates should be aware that merely stating that 'the government provide these goods' is not sufficient for a definition. Some candidates defined *demerit goods* instead of *merit goods*, while some gave poor examples.

Part (c) required candidates to discuss two measures used by government to correct market failure. Most candidates were able to identify the measures to correct *market failure* but could not adequately explain how each could be used. Many candidates did not include the effectiveness of the policies that were stated in their response. Some candidates included measures that could be used by the private sector instead of the government, for example, codes of ethics, voluntary agreements, among others.

#### **Recommendations**

Teachers should ensure that merit goods, in relation to market failure, are thoroughly discussed in class. It is recommended that teachers emphasize that merit goods result in a positive consumption externality and not a production externality. It is a positive consumption externality because when the good is consumed the social benefits to the whole community exceed the private benefits to the consumer. Therefore the emphasis should be placed on the tendency of merit goods to be underconsumed at the market price. With merit goods individuals may not act in their own interest because of imperfect

information, that is, they do not fully understand the private benefits of their consumption. Another way of looking at it is that consumers might only consider the private costs and benefits of consuming the goods, both cases explain the underconsumption of the good. A merit good is an example of market failure as the free market will provide the good, but the lack of information will mean that too little of the good will be demanded.

#### Question 5

This question was attempted by approximately 29 per cent of the candidates, 15 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 8.16 out of 25 (32.64 per cent). The standard deviation was 4.93. The highest mark of 23 out of 25 was achieved by one candidate.

Part (a) (i) tested candidates' ability to define *wage differentials*. The majority of candidates scored full marks on this question and showed excellent ability to define wage differentials. Very few candidates incorrectly gave definitions for income inequality.

Part (a) (ii) required candidates to identify the factors that cause imperfections in the labour market. The majority of candidates failed to score full marks on this question as they were unable to correctly identify the factors. Candidates found it more challenging to identify supply factors than to identify demand factors. Very few were able to give two correct factors for both demand and supply. Some responses included factors that affect demand and supply in the goods market.

In Parts (b) (i) and (ii), candidates were required to distinguish between *occupational mobility* and *geographic mobility* and evaluate the effects of labour mobility on wages across CARICOM territories.

For Part (b) (i), most candidates scored full marks in explaining geographical mobility and gave very good examples. However, many candidates only scored 50 per cent of the marks for occupational mobility because they were unable to recognize that it *involved a change in the skills of workers moving to different occupations*. In Part (b) (ii), the majority of candidates scored only 50 per cent of the marks. They failed to gain the other 50 per cent because, in their discussion they lacked knowledge of the effects of labour mobility within the context of CARICOM and in general.

Part (c) required candidates to assess the effect of a monopoly trade union in determining wages and the level of employment under perfect competition. The majority of candidates scored only two of the three marks for the diagram and were unable to explain the effect of a monopoly trade union on the wage rate and employment under perfect competition. In addition, many candidates drew market structure diagrams instead of labour market diagrams because of the words monopoly and perfect competition in the question.

#### **Recommendations**

Teachers are encouraged to emphasize that firms demand labour while workers supply labour. Also they should distinguish between the factors that will affect the supply of labour versus the demand. It is suggested that this topic be taught after demand and supply in the goods market while emphasizing the difference in the factor market. Teachers must teach concepts within the context of CARICOM and specifically demonstrate the effects of labour mobility on wages across CARICOM territories. They must also emphasize the distinction between the factor market and the labour market.

#### Question 6

This question was attempted by approximately 70 per cent of the candidates, 25 per cent of whom scored at least 50 per cent of the available marks. The mean mark was 9.82 out of 25 (39.28 per cent). The standard deviation was 5.123. One candidate achieved the maximum available mark.

Part (a) tested candidates' ability to explain the concept of *income inequality*. Most candidates achieved the maximum mark for Part (a). Weaker candidates gave the definition for wage differentials instead of income inequality and the majority of candidates did not give correct examples of income inequality.

Part (b) (i) posed a great deal of challenge to candidates. The question required them to explain three economic costs of poverty. Varied responses were given by candidates with respect to unemployment and the economic cost of poverty. However, the majority of candidates was able to explain crime as an economic cost, as well as inefficient allocation of government expenditure and lower potential output. Candidates who scored highly on this question displayed an ability to show in their arguments how poverty poses a cost to the government. Weaker candidates limited their responses to the burden of poverty on individuals and households. In their responses, some candidates gave causes of poverty instead of economic costs of poverty.

Part (c) tested candidates' higher order thinking skills. It required them to assess two economic benefits of governments' expenditure on poverty alleviation. This part of the question was generally well done, however, some candidates failed to specify the measures government could use to alleviate poverty.

### **Recommendations**

Students should keep abreast of current affairs in their own territory as well as the region as governments have implemented several initiatives/mechanisms to reduce income inequality and alleviate poverty. Teachers should try to engender an appreciation for cause and effect relationships in Economics. This appreciation would involve not only understanding the factors that contribute to poverty but the resultant costs inclusive of opportunity costs of poverty, that is, where poverty is widespread it has social and economic consequences and may impact key economic variables such as productivity, economic growth, unemployment and development.

Students also need to understand the composition and objectives of CARICOM since some of them, in their attempt to answer Part (c), seemed to believe that the expenditure by some governments in CARICOM was from sources external to Caribbean governments. Candidates need to understand that expenditure by governments on poverty alleviation has broader implications than just personal benefits to those in poverty. For example, expenditure on health and education not only benefit poor individuals who lack these services but also means that there is a more healthy, educated and skilled workforce which would lead to greater productivity and an increased potential for economic growth and development. Identifying these linkages would result in students scoring more on this type of question.

### **Paper 032 – Alternative to School-Based Assessment**

Sixty-three candidates wrote this paper. The mean mark was 18.41 out of 60 (30.69 per cent). The standard deviation was 10.42. The highest mark was 48 out of 60 — this was achieved by one candidate. Sixteen per cent of the candidates earned at least 50 per cent of the maximum available mark for this paper.

#### **Question 1**

The mean for this question was 4.37 out of 20 (21.85 per cent). The standard deviation was 4.18. The highest mark was 14 out of 20 — this was earned by two candidates. Fifty-three per cent of the candidates earned at least 50 per cent of the available mark on this question.

Part (a) comprised three parts. It required candidates to define the term *law of diminishing returns*; distinguish between *economies of scale* and *diseconomies of scale* and explain the factors that determine economies of scale and diseconomies of scale. In general, candidates performed fairly on this section; however, some of them confused the law of diminishing returns with the law of diminishing marginal utility. Candidates lacked the ability to make a distinction between economies of scale and diseconomies

of scale; they would offer a definition for one or both without drawing a distinction. Candidates were not able to identify the factors and, if identified, were unable to clearly explain them.

Part (b) (i) required that candidates define the term *supply schedule*; most of them were able to offer a suitable definition for the term. Parts (b) (ii) and (c) tested candidates' ability to identify two determinants of supply and to explain why the insurance and banking sector in the Caribbean are said to display *economies of scale*. Part (b) (i) was fairly done; however, some candidates confused the determinants of demand with that of supply. Part (c) was poorly done, candidates were unable to apply higher order thinking skills in this case.

Candidates need to do a thorough study of the material outlined in the syllabus and should aim to graduate from simply repeating definitions to understanding concepts and applying these concepts to the theme under consideration for the examination year. These are published on the CXC website each year. The prepared student, therefore, would have already researched information on the insurance and banking sector in the Caribbean as it relates to the syllabus. This information would have assisted candidates in answering the questions more thoroughly.

### Question 2

The mean for this question was 8.81 out of 20 (44.05 per cent). The standard deviation was 4.57. The highest mark was 18 out of 20 — this was earned by one candidate. Fifty-one per cent of the candidates earned at least 50 per cent of the available mark on this question.

Part (a) (i) required candidates to identify three features of perfect competition, monopolistic competition and monopoly, and Part (a) (ii) required candidates to determine which of the aforementioned market structures is best for consumers. Part (b) tested candidates' ability to state four features of the banking sector which support its characterization as an oligopoly. Part (c) required that candidates explain two negative consequences for consumers that can result from an oligopolistic market structure.

Candidates performed fairly on Part (a); however, some candidates confused the features of monopolistic competition with monopoly. Part (a) (ii) was well done; most candidates were able to identify the market structure that is considered best for consumers. Part (b) was fairly done as most candidates were able to state at least two features. Candidates had the most difficulty with Part (c) as some of them were unaware of the negative consequences for consumers as a result of oligopolies and as such were unable to furnish an appropriate response. However, there were some candidates who were able to give reasonably well-thought-out answers.

### Question 3

The mean for this question was 5.24 out of 20 (26.20 per cent). The standard deviation was 4.38. The highest mark was 18 out of 20 — this was earned by one candidate. Seventeen per cent of the candidates earned at least 50 per cent of the available mark on this question.

Part (a) (i) required candidates to define the term *income inequality*. It is apparent that not much time was spent studying this section of the syllabus. Most candidates were unable to give an accurate definition of the term income inequality. Most, if not all, referred to income inequality as *a different wage rate being paid to workers instead of a small proportion of the population earning the majority of the wages being paid*. Part (a) (ii) required candidates to list two measures of income inequality. Many candidates were unable to identify measures of income inequality and ways by which poverty can be measured.

Part (b) tested candidates' ability to explain two ways in which an efficient banking sector can contribute to poverty reduction. Part (c) required candidates to discuss two ways by which a non-competitive banking sector can contribute to greater poverty or inequality. This part of the question

proved to be the most challenging since a large number of students were able to identify low interest rate on loans, for various reasons, as a means by which banks can help to alleviate poverty. Loans to start business, for educational purposes and mortgages, were some of the types of loans identified by candidates. High interest rates were also identified as the main reason for poverty in relation to banks as well as the non-competitiveness of banks.

A major concern is that candidates do not possess the required depth and breadth of knowledge of the material in Module 3. Candidates' answers demonstrate only basic knowledge of the concepts and little in the way of application of these concepts. It is highly recommended that candidates address these shortcomings by seeking guidance from teachers of the subject matter.

### **Paper 031 – School-Based Assessment (SBA)**

The mean for this paper was 42.18 out of 60 (70.30 per cent). The standard deviation was 9.38. The highest score was 60 out of 60 — this was achieved by 44 students. Forty-nine students scored 59 out of 60. Ninety-one per cent of the students earned at least 50 per cent of the maximum available mark for this paper.

Generally, the projects selected were properly formulated and the objectives related to the topics. The aims were clearly stated and the methodologies were appropriate. The data collected were well organized, presented, analysed and mirrored the applicable economic concepts, principles, methods and theories for the unit under investigation.

#### **Strengths of the SBA**

- Students demonstrated good knowledge of the theories, principles and concepts necessary to present good projects.
- The topics chosen were appropriate as they were in agreement with the criteria (mark scheme) outlined in the syllabus.
- The economic concepts used were related to the topic selected; they were clear, precise and significant.
- Some students showed that they were able to articulate well and organize their evidence, which showed good problem-solving skills.
- Some students presented theoretically correct judgements based on the findings of their research topics.
- Some students demonstrated good citation and referencing of the data sources from which information was garnered.
- Some students adequately used language and demonstrated satisfactory reporting skills.

#### **Weaknesses of the SBA**

- Title — too wide for proper research. It was observed that some students were still struggling to formulate appropriate topics for their research, for example 'Demand'; 'To investigate the extent to which street vendors in Spanish Town operate as a perfect competition market structure'; 'The Market Structure of Jamaica'.
- Communication — bibliography/references should be written using an international standard. Ways of citing information needs to be improved — all citation used in the project must appear in the bibliography; internet citation should also be written in the bibliography; internet citations and interview sources should be written in the bibliography.
- Sometimes marks awarded by teachers were not consistent with the marking criteria set out in the syllabus and, as a result, marks awarded appeared to be inconsistent and extremely lenient. Marks were given for areas that were not present in the project. Conversely, some teachers penalized students unnecessarily.

- A number of reports were too similar; hence it is recommended that students do their individual presentation of data although they may collaborate in the gathering of data. For example, reports should not have the same words and exact data variables, the same questionnaires and sample.
- Even though there was a general improvement in methodology, there were some students who still fell short of adequately writing a proper methodology. The methodology must include the design of the instruments and validation of the reasons why they are suitable for the specific research — explanation of population size, sample size, instruments, limitations.
- Recommendations should be workable solutions to the problems being investigated based on the findings of the related research.
- Some students are still showing weaknesses in data presentation and analysis as is illustrated in the following example: “The company is situated in an environmentally friendly area, however, there are violent communities in the distance away from the cinemas which unscrupulous individuals travel from to invade the possessions of viewers.”
- Some students constructed a weak primary instrument which resulted in poor data collection for the research. Students should limit the use of ‘yes’/‘no’ data questions on questionnaires.

### **Recommendation**

It is recommended that students do their individual presentation of data although they would have collaborated in the gathering of the data. Reports should not have the same words, exact data variables, questionnaires and sample. Teachers should liaise with colleagues who are experienced and proficient in the SBA component of the assessment and engage in information sharing. This sharing could include examining exceptional papers, average papers and poorly done papers to ascertain what the standard is, so as to aid less experienced teachers in guiding their students as well as marking the SBA.

## UNIT 2 – MACROECONOMICS

### Paper 01 – Multiple Choice

This paper consisted of 45 items, 15 questions on each module. The items spanned knowledge, comprehension and application. Performance on the paper was good. The mean mark was 64.15 out of 90 (71.28 per cent). The standard deviation was 13.77. Approximately 90 per cent of the candidates scored at least 50 per cent of the maximum available mark on this paper. Four candidates scored the maximum mark.

### Paper 02 – Essays

This paper consisted of six questions, two from each module. Candidates were required to answer one of two questions from each of the modules. Each question was worth 25 marks. The mean score was 63.26 out of 150 (42.17 per cent). The standard deviation was 26.91. Approximately 34 per cent of the candidates scored at least 50 per cent of the maximum available mark on this paper. The highest mark of 142 out of 150 was achieved by one candidate.

#### Question 1

This question was attempted by approximately 73 per cent of the candidates, 67 per cent of whom scored at least 50 per cent of the available marks. The mean mark was 8.95 out of 25 (35.8 per cent). The standard deviation was 6.04. Five candidates achieved the maximum available mark.

Part (a) (i) required candidates to define the term *gross domestic product (GDP)*. This part of the question was generally well done. Weaker candidates did not indicate a timeframe or the relevance of a specific geographical area. Stronger candidates mentioned both as well as final goods and services.

In Part (a) (ii), candidates were required to explain why certain final goods and services would not be included in the measurement of GDP, and why economists use *real GDP* rather than *nominal GDP* to gauge economic wellbeing. Candidates who did well on this part of the question recognized that the focal point of the question was explaining why certain *final* goods and services were not included in the measurement of GDP. Stronger candidates mentioned *do-it-yourself activities, illegal goods, transfer payments, and second hand transactions*. Weaker candidates ignored the word *final* and mentioned intermediate goods. Most candidates did not explain but rather identified why certain final goods and services were not included in the measurement of the GDP. In several cases the explanation did not match the example or the illustration was poor.

In Part (a) (iii), candidates were required to calculate real GDP, given nominal GDP and the GDP deflator, and percentage changes in both. A significant number of candidates recognized that inflation had some role to play in differentiating between real and *nominal GDP but were not clear on how*. *Those candidates who fully grasped the concepts noted that nominal GDP is GDP at current prices which grow due to either an increase in output and/or inflation*. However, real GDP is GDP at constant prices which only reflect an increase in output. Many candidates distinguished between the two but failed to conclude that *economists use real GDP rather than nominal GDP to gauge economic wellbeing because real GDP is not affected by changes in prices but changes in what is actually produced*.

In Part (b) (i), many candidates failed to recall the formula required to calculate real GDP and so were not successful in earning marks for this part of the question. Some multiplied by the deflator; others divided by 100 or completely omitted it (100) from their calculations. The formula is *[nominal GDP/deflator] x 100*.

In Parts (b) (ii) and (iii), many candidates lacked the mathematical skills necessary. Simple tasks, such as rounding off, were poorly done. Stronger candidates were able to recall the formula and go on to make accurate calculations but too many subtracted *old* from *new* and then divided the result by the *new*. The formula is  $[new - old/old] \times 100$ . Some candidates used real potential GDP instead of real GDP as was required. In Part (b) (iv), a majority of candidates did not recognize that they were to use the calculations from the previous part of the question to make judgments for this section. They therefore made general statements and some repeated what they had previously written for Part (a) (iii). For Part (b) (v), many candidates did not remember the formula necessary to calculate the output gap. This formula is  $[real\ or\ actual\ GDP - potential\ GDP/potential\ GDP] \times 100$ . In Part (b) (vi), most candidates were able to accurately identify at least one of the output gaps.

### **Recommendations**

- Candidates must recognize that the definition of GDP has three components: timeframe, final goods and services, and some geographical boundary.
- Candidates must clearly distinguish between the limitations of national income statistics as measures of economic wellbeing versus items excluded to avoid double counting.
- Candidates ought to develop the habit of writing out formulas before making calculations. They should then substitute the figures into the formula before making calculations. More practice of mathematical type problems ought to be done and candidates are encouraged to write out their work in logical, sequential steps.
- Finally, it must be impressed upon candidates the need to read all instructions carefully before attempting questions.

### **Question 2**

This question was attempted by approximately 29 per cent of the candidates, 12 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 8.01 out of 25 (32.04 per cent). The standard deviation was 4.37. The highest mark of 22 out of 25 was achieved by one candidate.

Part (a) (i) required candidates to identify the most important determinant of consumer spending and personal savings. Most candidates identified income but the stronger ones stated *personal disposable income*. Candidates did not score for indicating wealth because, even though it is a determinant, they were required to use judgement and identify the most important.

Part (a) (ii) required that they define the terms *marginal propensity to consume (MPC)* and *marginal propensity to save (MPS)*. Stronger candidates accurately defined the concepts but weaker candidates failed to include the terms *marginal* or *change* or *increment* and therefore defined average instead of marginal. Many candidates were able to recall the formula though their definitions were inaccurate.

Part (a) (iii) asked that candidates describe the relationship between the MPC and the MPS. Most candidates were able to state that  $MPS + MPC = 1$ . Weaker candidates indicated that  $MPS + MPC = Y$ . Candidates failed to mention that any change in income which is not consumed is saved and that as the MPC increases the MPS falls and vice versa.

Part (b) required that candidates calculate the average propensity to consume (APC), average propensity to save (APS) and the multiplier, and to interpret the value calculated. In Part (b) (i), many candidates failed to substitute properly into the formula. Some were able to correctly calculate consumption but were not able to go on further to derive the APC. Some used disposable income to calculate the APC. Weaker candidates did not use the  $APS = 1 - APC$  formula and calculated savings instead. For Part (b) (ii), most candidates were able to correctly calculate the multiplier but were unable to interpret its

values; that is, *for each dollar spent on consumption, output will increase by the value of the multiplier*. Some candidates spoke of the multiplier effect of changes in consumption as opposed to injections or autonomous consumption.

Part (c) required candidates to distinguish between *the investment demand curve* and *the investment curve*. This part was the most poorly answered section. Few candidates were able to distinguish between the terms or define one. Many confused the investment demand curve with the investment curve or did not have any knowledge of the concepts at all.

In Part (d), candidates were required to use the accelerator model of investment to calculate changes in investment caused by changes in the capital to output ratio. Very few candidates wrote out the formula for calculating the change in investment. Many failed to correctly signify a fall with a negative sign, while others subtracted the change in investment from the change in output.

### **Recommendations**

- Candidates must do significant practice with questions that require mathematical skills.
- Candidates must practice interpretation of the multiplier and a clear distinction must be made from the money multiplier.
- It must be made clear that consumption is determined by income and therefore changes in income are brought about by changes in injections or, specifically, autonomous consumption.
- Clear explanations must be given and the distinction made between the investment demand curve and the investment curve:
  - The Investment Demand Curve:
    - Stock concept
    - Displays the relationship between investment demand and interest rates
    - Refers to planned investment
  - The Investment Curve
    - Is a flow concept
    - Shows the relationship between investment and national income
    - Refers to actual investment
- Clear distinctions must be made between averages and marginals.

### **Question 3**

This question was attempted by approximately 65 per cent of the candidates, 45 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 12.67 out of 25 (50.68 per cent). The standard deviation was 3.74. The highest mark of 22 out of 25 was achieved by two candidates.

The majority of candidates was able to do simple calculations and was awarded a maximum of 10 marks. The calculations required by this question did not allow for the separation of the weak, average and strong candidates. Even the very weak candidates were able to obtain at least eight marks.

Part (a) (i) tested candidates' comprehension of national budget deficits and national debt. It was fairly done where some candidates described balance of payment deficit and GDP in lieu of budget deficit thus eliminating the use of government revenue and expenditure in the explanation. Stronger candidates defined national budget deficit as *the shortfall between government revenues and expenditure in one year's budget*, and national debt as *the accumulation of borrowing over time resulting from the series*

*of deficits minus any surpluses.* Only a few candidates did not include the words *total, stock, accumulation* in defining national debt as well as to include that the debts are over a period of time.

Part (a) (ii) tested candidates' knowledge of causes of national debt. There were clear discrepancies in stating the causes instead of the effects of national debt. This part required candidates to state the causes of national debt which may include *deficit financing, borrowing for capital projects, poor tax collection effort, inefficiencies of public sector, welfare programmes, corruption and disaster mitigation.*

In Part (b) (i), candidates were required to provide an analysis of the national debt to GDP ratio. This was a specific area of weakness for candidates as they had difficulty evaluating public debt as a burden and explaining why the size of the national debt is commonly expressed as a ratio to GDP. It must be noted that the public debt is commonly expressed as a ratio to GDP *to avoid misleading the country and to inform policymakers as to whether the GDP is larger than the debt which implies that the country has the capacity to service the debt* as well as to know whether the GDP is growing faster than the debt. In most cases candidates were not able to explain why the debt is expressed as a ratio and as such most candidates scored between zero and one.

Part (b) (ii) examined candidates' ability to evaluate public debt as a burden on future generations. Candidates did not give a balanced evaluation of the statement in Part (b) (ii) and so most of them scored between zero and two marks in this section.

In Part (c) (i), application of knowledge was required as candidates were given government tax revenue and spending figures to calculate and show the budget balance by indicating where there is a balance, deficit or surplus. Candidates were also required, in Part (c) (ii), to calculate the public debt for an economy. Candidates' performance was commendable. Most candidates were able to complete the table which required them to show how the budget is balanced by surplus, deficit or neither and calculate the public debt for the period. Most candidates were awarded the full ten marks for this section.

### **Recommendations**

- The national budget which is made up of government expenditure and government revenue should be explained with the use of examples so that students can get a better view of the concept and how the budget is calculated.
- Candidates should pay close attention to clearly interpreting calculations in relation to the content.
- Major economic concepts like the national debt should be reiterated so that students have a better grasp of them.
- Students should be made to understand that the term, *evaluate means to carefully appraise the matter in hand, citing both advantages and limitations. Emphasize the views of authorities as well as your personal estimation* (Caribbean Examinations Council, 2010).

### **Question 4**

This question was attempted by approximately 37 per cent of the candidates, 28 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 9.24 out of 25 (36.96 per cent). The standard deviation was 6.34. One candidate achieved the maximum available mark.

Part (a) (i) required candidates to define the term *fiscal policy*. Most candidates were able to give a clear and accurate definition of fiscal policy. However, there was a notable number of candidates who did not obtain full marks because they did not express any effect on a macroeconomic variable. Stronger candidates defined fiscal policy as *the changes in government spending and/or increases or decreases in taxes to achieve some desired objective such as full employment, to control inflation, or stimulate economic growth.*

Part (a) (ii) required candidates to explain, using appropriate examples, the term *automatic stabilizers*. This proved difficult for most candidates who did not clearly understand the concept of an automatic stabilizer. As such, many of them failed to score full marks. Most candidates were able to identify two correct examples of automatic stabilizers but were unable to clearly show why they are in fact automatic stabilizers.

In Part (a) (iii), candidates were asked to distinguish between *discretionary* and *nondiscretionary* fiscal policy. Many candidates were unable to make the distinction. Very few candidates scored full marks on this section. Some candidates referred to monetary instead of fiscal tools, others simply did not know the difference between the two concepts. Stronger candidates knew that discretionary fiscal policy is *the deliberate manipulation of taxes and spending by government to alter real domestic output and employment to control inflation, and to stimulate economic growth during a particular period of time* while non-discretionary fiscal policy is *the change in government expenditure or taxes which occurs automatically as a result of existing legislations (taxes and welfare programmes)*.

In Parts (b) (i) and (ii), candidates were asked to analyse how monetary policy can be used to address inflation and a recession. Part (b) (i) was well done. Most candidates were able to gain some marks if not all in this section. A small number of candidates used fiscal instead of monetary policy and thus were unable to score well. However, the majority of candidates was able to correctly and sequentially describe how monetary tools can correct a recession. For Part (b) (ii), the majority of candidates was able to correctly employ monetary tools to correct inflation.

Candidates were asked in Part (c) (i) to define the term *stagflation*. The question proved to be challenging for candidates. The majority of them seemed to be unfamiliar with the term *stagflation* and although most candidates responded, the definitions were most times incorrect. Stronger candidates defined stagflation as *a situation where the inflation rate is high, economic growth is low, and the unemployment rate remains steadily high*.

For Part (c) (ii), candidates were asked to draw an accurately labelled Phillip's curve and explain how the use of fiscal and monetary policies to solve problems of inflation and unemployment can further compound the problem. A large number of candidates were unable to draw the Phillip's curve correctly. In a significant number of responses, candidates did not label the axes correctly. Furthermore, candidates were not always able to use the graph to explain how policy can affect the illustrated variables. Candidates' responses were therefore weak in this section.

## **Recommendations**

- Candidates have clear understanding of definitions and key concepts in macroeconomics such as *automatic stabilizers, discretionary stabilizers and stagflation* and so on.
- Candidates should be able to clearly distinguish between monetary and fiscal policy and their effects on the economy.
- Candidates need to be able to draw a simple Phillip's curve and explain the tradeoff between inflation and unemployment highlighting the effects of expansionary and contractionary monetary and fiscal policies on both macroeconomic variables.
- Emphasis should be placed on correctly labelling the axes of graphs.

### Question 5

This question was attempted by approximately 13 per cent of the candidates, 21 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 9.48 out of 25 (37.92 per cent). The standard deviation was 5.05. The highest mark of 23 out of 25 was achieved by two candidates.

This was not a popular question, approximately eight per cent of the candidates attempted it. Generally, candidates performed poorly on this question.

Part (a) (i) tested candidates' ability to calculate the percentage of World GDP earned by each income group given in a table. Most candidates were able to score full marks because they accurately calculated the percentage of World GDP earned by each income group.

Part (a) (ii) list four factors causing inequality amongst income groups in the table. Most candidates were able to identify at least two factors contributing to income inequality amongst all groups in the table.

In Part (a) (iii), candidates were required to identify the income group in which the majority of CARICOM countries fall and state two structural peculiarities of CARICOM countries which might justify them in that group. This was poorly done. Though the majority of candidates was able to identify the income group in which the majority of CARICOM countries fall (lower-middle), they were unable to state the structural peculiarities such as *openness, size, limited resource base, poverty*, among others. Candidates may not have understood what was meant by 'peculiarities.'

Part (a) (iv) required candidates to outline three implications for CARICOM economies that might result from the structural peculiarities identified in Part (a) (iii). Candidates performed poorly. They were unable to identify the implications of the structural peculiarities. The discussion presented on the implications focused on the domestic economy and not the world economy, for instance, dependence on foreign aid for development and dependence on preferential trade agreement in order to have a ready market for their exports.

For Part (b), candidates were asked to discuss one benefit and one cost of economic growth. The majority of candidates adequately discussed the benefit of economic growth. However, they had difficulty discussing the cost of economic growth and as such received little or no marks. Stronger candidates developed their discussions on economic costs such as environmental degradation, high rates of growth are not sustainable and inflation.

### **Recommendations**

- Students must be given adequate practice in calculating and interpreting economic statistics.
- When discussing an economic concept, students must "Examine and analyse carefully, giving reasons, pros and cons, advantages and disadvantages. Be complete, and give details. They must consider all sides of the issue and reach a balanced conclusion (Caribbean Examinations Council, 2010).

### Question 6

This question was attempted by approximately 87 per cent of the candidates, 41 per cent of whom scored at least 50 per cent of the available mark. The mean mark was 11.96 out of 25 (47.84 per cent). The standard deviation was 5.28. The highest mark of 24 out of 25 was achieved by ten candidates.

Part (a) (i) tested candidates' ability to identify three factors which may affect the levels of imports and exports of a country. Most candidates were able to identify two of the three factors influencing the levels of exports and imports in an economy. Weak candidates stated 'tariffs, quotas and embargoes'

as three separate factors, when in fact they are barriers to trade which is one factor which affects the level of imports and exports in an economy. The other factors may include *international prices, domestic production, domestic prices, international economic activities, shifts in international demand and the emergence of substitutes* as well as *changes in international income*.

Part (a) (ii) had two sub-parts. In Part (a) (ii) a), candidates were required to explain the concept of *comparative advantage*, and in Part (a) (ii) b), they had to explain the effects of foreign exchange earnings on small open economies. Candidates performed fairly well on Part (a) (ii) a), and were able to explain that comparative advantage was due to lower opportunity cost of production by one country compared to another. Weaker candidates confused the explanation of absolute advantage with comparative advantage. In explaining comparative advantage, candidates were required to state that a country should specialize in the producing the goods in which they have the lowest opportunity cost. Part (a) (ii) b) was poorly done. Candidates explained the effects of depreciation and appreciation of the exchange rate instead of explaining the effects of the exchange rate earnings on the economy. The effects of foreign exchange earnings on small open economies include *providing small open economies with the resources to purchase the capital goods necessary for production, these economies can purchase consumer goods that are not produced locally and export earnings have a multiplier effect of increasing output*.

Part (b) (i) required the definition of the term *protectionism* and Part (b) (ii) asked candidates to discuss the infant industry argument for protection. Candidates were generally able to define protectionism. Weaker candidates explained protectionism in terms of protection of the local industry rather than protecting domestic or local industries from foreign competitors. For Part (b) (ii), candidates performed fairly well. Candidates were able to explain why infant industries needed protection. However, most of them omitted from their discussion the desired outcomes for the infant industry, for example, *to attain economies of scale and compete in the global market place*.

Part (c) (i) required candidates to define the term *trade liberalization*. Candidates were able to accurately define the term. Part (c) (ii) asked candidates to discuss two benefits of trade liberalization. This was well done. However, some candidates confused the benefits of trade liberalization with the benefits of economic integration and globalization. Candidates sometimes used these terms interchangeably. Benefits of trade liberalization include *specialization in the good which the country has comparative advantage in producing, greater access to technology and increased competition across the world which lowers the cost of production and increases productivity resulting in greater access to a wider variety of goods and services at a cheaper price*. Consumers have a wider variety to choose from which increases their choice and by extension their standard of living.

## **Recommendations**

- Case studies could be included in the teaching and learning experience to foster higher order thinking.
- Cooperative learning should be encouraged.

### **Paper 032 – Alternative to School-Based Assessment**

Twenty-five candidates wrote this paper. The mean mark was 25.16 out of 60 (41.93 per cent). The standard deviation was 12.54. The highest mark was 46 out of 60 — this was achieved by one candidate. Two candidates scored 59 out of 60. Forty per cent of the candidates earned at least 50 per cent of the maximum available mark for this paper.

#### **Question 1**

The mean for this question was 9.48 out of 20 (47.40 per cent). The standard deviation was 5.04. The highest mark was 19 out of 20 — this was earned by one candidate. Sixty per cent of the candidates earned at least 50 per cent of the available mark on this question.

This question required that candidates define consumption function and autonomous consumption; identify three non-income determinants of consumption; outline two ways in which internet shopping can have a negative impact on the GDP of a country; discuss three ways in which the expansion of internet shopping can contribute positively to raising the country's standard of living or GDP.

Candidates who performed well satisfied, in general, all the imperatives. Definitions in most instances were clearly stated, and non-income determinants of consumption were identified. In Part (b), the candidates correctly outlined two ways in which internet shopping can have a negative impact on GDP. In Part (c), those who scored well presented comprehensive discussions on the positive impact on internet shopping on a country's GDP and/or standard of living. Even though candidates scored relatively well on the question as a whole, some failed to give a correct definitions of the consumption function and/or autonomous consumption.

In Parts (b) and (c), some candidates were repetitive and did not focus on two separate points, (Part b) or the three separate points, (Part c). As such, they lost marks in these areas and did not score as well as they could have.

Weaker candidates faced challenges in virtually all areas of the question. The very weak ones could not accurately define the terms (Parts (a) (i) and (ii)) nor could they identify three non-income determinants of consumption.

For Parts (b) and (c), the level of discussion was poor. Candidates were often only able to focus on a point or two which were poorly presented and discussed. Inaccuracies in candidates' reasoning and explanation were evident.

Altogether, the question challenged most candidates, few of whom performed well. Areas of the question which required sound reasoning, analysis of the knowledge available and evaluation were the areas in which most candidates performed poorly.

#### **Question 2**

The mean for this question was 8.52 out of 20 (42.60 per cent). The standard deviation was 4.30. The highest mark was 16 out of 20 — this was earned by one candidate. Forty-four per cent of the candidates earned at least 50 per cent of the available mark on this question.

Candidates were required to define monetary transmission mechanism and monetary policy; identify two types of money; state three functions of money; state three desirable properties of money; assess how Caribbean governments' tax revenues can be affected by increasing amounts of online shopping by residents, and assess how monetary policy can be used to reduce the amount of online shopping, given that most online purchases are done using credit cards.

In Part (a) (i) a), candidates performed poorly and struggled to define the terms. Most candidates did not score any marks and a few were able to score one out of two marks. For Part (a) (i) b), most candidates were able to score one out of two marks because they presented a response that was only partially correct.

In Parts (a) (ii) (iii) and (iv), most candidates performed well. Types, characteristics and functions of money were widely known.

In Part (b), candidates performed poorly because this section of the question required higher order skills of analysis. Candidates were able to score at least two out of four available marks in most cases, for a weak analysis of how government revenues from taxes are affected by online shopping. Most candidates did not present a balanced view and only focused on either the positive or negative effect.

For Part (c), candidates were familiar with the tools of monetary policy but in a notable percentage of the responses candidates could not correctly link monetary policy to reducing credit card use.

### Question 3

The mean this question was 7.16 out of 20 (38.5 per cent). The standard deviation was 4.63. The highest mark was 16 out of 20 — this was earned by two candidates. Thirty-two per cent of the candidates earned at least 50 per cent of the available mark on this question.

The question was intended to test candidates' knowledge of balance of payments and exchange rates.

Candidates were required to define exchange rate and balance of payments; identify three main types of exchange rates; outline two reasons why a *free-floating exchange* is argued to be better than a *fixed exchange*; and explain three ways by which increased online shopping can negatively impact the balance of payments of such countries.

Generally, the question was poorly done. In Part (a) (i), most candidates were able to define exchange rate correctly. Some candidates also gave examples. However, for Part (a) (i) b), most candidates did not score full marks for their definition of balance of payments because they failed to include the time period in their answers. In Part (a) (ii), candidates were able to identify the fixed and the floating exchange rate regimes. However, most candidates did not identify the managed float exchange regime as one type of exchange rate.

Part (b) was poorly done. Most candidates focused on the advantages of the fixed exchange rate instead of outlining the advantages of the floating exchange rate regime in comparison to the fixed exchange regime.

Candidates who attempted Part (c) were unable to fully develop a comprehensive explanation of the negative impact of increased online shopping on the balance of payments.

### **Recommendations**

- Instructional material should include multimedia presentations such as videos which assist students in visualizing the concepts taught.
- Student should practise answering higher order questions which require them to *discuss, evaluate, assess and analyse*. Only when they develop these skills will they be able to apply them in the exam.

### **Paper 031 – School-Based Assessment (SBA)**

The mean for this paper was 40.55 out of 60 (67.58 per cent). The standard deviation was 9.38. The highest score was 60 out of 60 — this was achieved by one student. Three students scored 59 out of 60. Eighty-one per cent of the students earned at least 50 per cent of the maximum available mark for this paper.

Generally, the topics of the projects selected were fairly formulated and the objectives were related to the topics. The aims were clearly stated and the methodology was appropriate in some instances. The data collected were fairly organized, presented, analysed and mirrored the applicable economic concepts, principles, methods and theories for the unit under investigation.

#### **Strengths of the SBA**

- Students demonstrated good knowledge of the theories, principles and concepts necessary to present good projects.
- The topics chosen were appropriate as they were in agreement with the criteria (mark scheme) outlined in the syllabus.
- Some students showed that they were able to articulate and organize their evidence which showed good problem-solving skills.
- Students presented theoretically correct judgements based on the findings of their research topics.
- Some students demonstrated good citation and referencing of the data sources from which information was garnered.
- Excellent use of language and reporting skills were evident throughout the reports.

#### **Weaknesses of the SBA**

- Some students used macroeconomics topics, aims and objectives to investigate and present microeconomic problem-solving reports.
- Students used microeconomic topics, aims and objectives to investigate and present macroeconomic problem-solving reports.
- It was observed that some students were still struggling to formulate appropriate topics for their research, for example, “An investigation of the causes and effects cost of inflation and solutions to control inflation by fifteen (15) residents of the community Valencia during the period January 2015.”
- The topic chosen for the research should be ‘time specific’ and confined to a specific region or country, not a community or district.
- Secondary data sources were not used to support evidence of problem solving. Information was used in a general sense with no concrete evidence. Some projects used strict primary data to support a macroeconomic concept.
- Recommendations should be workable solutions to the problems presented. Some candidates are still having challenges linking the judgement and recommendations to the topics being researched and the findings.