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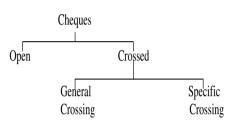
Students from Stars Academy of the Arts perform 'Di Drum A Talk' a tribute in speech in honour of National Hero, Sir Alexander Bustamante, commemorating the 134th anniversary of his birth at National Heroes Park, Kingston recently.

yl:office administration

HYACINTH TUGMAN

I, STUDENTS. As promised, I am now completing the lesson I started last week, and your SBAs should now be in their final stages.

Basically, there are two types of cheques – open and crossed. In addition, the crossed cheque can be divided into two categories – those with general crossings and those with specific crossings. The figure below illustrates this classification.



OPEN CHEQUE

An open cheque does not have two parallel lines and can be cashed at the bank by the payee once he endorses it (signs his name on the reverse side). If the payee wishes to transfer the cheque to someone else, he can do so by endorsing it and writing a note on the back authorising the bank to pay that person. This type of cheque is not very secure because, if it is lost or stolen, anyone may be able to cash it if he can persuade the bank that he is the payee.

CROSSED CHEQUE

When a cheque is crossed, two parallel lines are drawn across the cheque. In addition, '& Co.' may be written between the lines. A crossed cheque cannot be cashed, but must be deposited into an account. It is much safer than an open cheque.

CROSSED CHEQUE – A/C PAYEE ONLY

This type of cheque is even safer than a general crossed cheque because it is not transferable. It must be deposited into the account of the payee, and not in anyone else's account.

CROSSED CHEQUE – SPECIFIC CROSSING

This specially crossed cheque not only states that it must be paid into the account of the payee, but also gives the name of the bank at

Types of cheques



Kingston College s Class One 4x100m relay team.

which the cheque must be deposited.

DISHONOURED CHEQUE

A cheque is said to have been dishonoured when the bank has, for some reason or other, refused to pay on presentation. The reasons for refusal may be attributed to one of the following causes:

- Words and figures differ.
- There are insufficient funds.

■ Irregular endorsement, i.e., the name on the reverse of a cheque does not correspond with the payee's name on the front.

- Drawer's signature differs from that in the bank's records.
- An alteration requires signing.
- The cheque may be out-of-date (stale).
 The cheque is post-dated.

POST-DATED CHEQUE

A post-dated cheque is one which is dated ahead of the current date. A bank does not credit the customer's account with the amount of a post-dated cheque until the due date.

CERTIFIED/MANAGER'S CHEQUE

A certified cheque is one which is issued by the bank upon the request of the customer. The person receiving a certified cheque is guaranteed payment upon presenting it at a bank.

THE BANK STATEMENT

At regular intervals, or on request, the bank will send to a customer a bank statement which provides a record of all transactions that have taken place between the customer's account and the bank. Amounts which reduce the balance in the account are shown in the payment column, and amounts which increase the balance are shown in the receipts column. As each payment or receipt is recorded, a new balance figure is shown in a third column.

In addition to bank account services and the cheque facilities, banks offer a wide range of

services that are used by businesses: Here I will give you a few.

STANDING ORDER

The customer authorises the bank to transfer a certain sum of money to another account at regular intervals.

CREDIT TRANSFER

A debtor utilises this service when he wishes to pay a number of suppliers. He prepares one cheque with a list of names of suppliers and the bank sends the amount owed to each.

CREDIT CARD

This service enables the customer to purchase goods and services without the use of cash.

Have a blessed week.

Hyacinth Tugman is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:principles of business

Business finance test #2

YVONNE HARVEY Contributor

T IS so good to be with you all again. Last week was your essay paper (Paper 02) on business finance. This week, as promised, I have prepared a few multiple-choice questions for you to do, so here goes.

1. The only bank which can claim to be the lender of last resort is the:

(a) Central bank

(b) Commercial bank

(c) Merchant bank

(d) Trustee savings bank

2. One of the most important functions of the central bank is to:

(a) Borrow money from individuals.

(b) Keep deposits from commercial banks.

(c) Lend money for building houses.

(d) Keep deposits put through the night safe.

3. The primary purpose or function of the commercial bank is to:

(a) Lend money.

(b) Borrow money from other banks.(c) Accept money deposits and personal valuables.

(d) Invest deposits.

4. A sou-sou is another form of:

(a) Saving money through a common bond.(b) Spending money.

(c) Paying dues to a trade union.

(d) Belonging to a social institution.

5. The main purpose of a merchant bank is to: (a) Finance traders and their trade.

(b) Lend money to the public at large.

(c) Act as a security.

(d) Provide night-safe facilities.

The following information relates to questions 6 and 7:

(i) Building societies (ii) Development banks

(iii) Commercial banks (iv) Credit unions

(...)

6. Which of the above institutions is part of



Jamaica College's Chislon Gordon (second right) awaits the baton exchange from his teammate before going on to anchor his team to a win in the Class One Boys' 4x100m relay at the Gibson McCook Relays at the National Stadium recently.

the capital market? (a) (i) and (ii) only (b) (ii) and (iii) only (c) (iii) and (iv) only (d) (i), (ii), (iii) and (iv)

7. Which of the institutions form part of the money market?(a) (i) and (ii) only

(b) (iii) and (iv) only (c) (ii) and (iii) only (d) (ii) and (iv) only

8. A credit union is founded or based mainly on:(a) A common bond of all employees.(b) The company's integrity.(c) Profits of members.(d) The creditworthiness of the union.

9. The stock exchange is a market place

where: (a) Stocks are exchanged for shares. (b) Second-hand securities are bought and sold.(c) Brokers buy and sell goods.(d) All companies raise financial capital.

10. Savings take place when you:
(a) Buy goods and services for daily use.
(b) Refrain from consuming a part or whole of your income.
(c) Use menous to pay debte

(c) Use money to pay debts. (d) Borrow money.

11. Of the following, which is NOT accepted for collateral security?(a) Life assurance policies.(b) Titles to land or property.(c) Stocks and shares.(d) Money lent out or invested.

12. The highest rate of interest at a commercial bank is obtained from a: (a) Current or cheque account. (b) Savings or deposit account.(c) Longer-term fixed deposits.(d) Short-term fixed deposits.

13. The primary focus of attention of the Caribbean Development Bank is to:(a) Help the entire Caribbean region.(b) Promote individuality and self-reliance.(c) Help finance the needs of the smaller

Caribbean countries.

(d) Promote employment opportunities in the larger countries of the region.

These questions were taken from **Revising Principles of Business for CXC** by BMC Abiraj. Next week, I will give you the answers to these questions. Also, we will begin Section 8 of the syllabus: Role of Government in an Economy. Keep yourselves safe until then.

Yvonne Harvey is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:principles of accounts

Interpretation of final accounts

ROXANNE WRIGHT

Contributor

Below ARE some concepts and their definitions. They will come in useful as you go through the worked examples that follow.

ADJUSTMENTS

The year-end adjustments are done in the final accounts to arrive at incomes and expenses of the current year, in accordance with the matching principle.

EXPENSES

1. EXPENSES ACCRUED

a. Expenses accrued at the beginning of the year are expenses from the last year. They will be either deducted or credited in the expense account.

b. Expenses accrued at the end of the year is the expense for the current year. They are added or debited in the expense account.

c. Accrued expenses are liabilities which are to be recorded under current liabilities in the balance sheet.

2. EXPENSES PREPAID

i. Expenses prepaid in the beginning of the year are expenses for the current year. They are added or debited in the expense account.

ii. Prepaid expenses at the end of the year are advance payments for the following year. They are deducted or credited in the account.

INCOMES

Receivable incomes at the:

Beginning of the year is income from the previous year. They are deducted or debited in the income account.

End of the year are income for the current year. They are added or credited in the income account.

CAPITAL OWNED

This is capital invested by the owner in the business. It is affected by:

- i. Additional investment
- ii. Drawings
- iii. Net profit

iv. Net loss

WORKING CAPITAL

This is the day-to-day cash available to operate the business.

It is current assets less current liabilities.

CAPITAL EMPLOYED

- This is:
- a. Capital owned plus long-term liabilities.
- b. Total assets less current assets.
- c. Fixed assets plus working capital.

ADJUSTMENTS IN FINAL ACCOUNTS

Adjustments are given at the end of the year after the trial balance has a double effect on the accounts.

CLOSING STOCK

These are listed in the trading account and in current asset in the balance sheet.

PROVISION FOR DEPRECIATION

The current year expense and accumulated depreciation is deducted from fixed asset in the balance sheet.

PROVISION FOR BAD DEBTS

This can either be an increase or decrease in profit and loss account. The current year balance to be deducted from debtors in balance sheet.

WORKED EXAMPLE

You are required to:

a. State the formula for calculating working capital.

b. Calculate the working capital from the balances below. Show all workings.

	\$
Capital	238600
Premises	208000
Bank loan, to be repaid 2005 [>2]	119200
Bank loan interest owing	5400
Delivery vehicles	52800
Cash at bank	17600
Goodwill [>3]	27000
Insurance prepaid	600
Expenses owing	800
Debtors	38000
Creditors	22800
Stock at September 30, 2001	42800

c. Give TWO examples of problems a business may have if there is not enough working capital.

d. Describe and explain TWO ways in which a sole trader can increase the working capital.

REASONING

Classify items of current assets and items of current liabilities.

- Long-term liabilities.
- Intangible asset.

SOLUTION

a. Working Capital = Current Assets - Current Liabilities

b.			
	Current Assets	\$	\$
	Current Assets:		
	Cash at Bank	17600	
	Prepaid insurance	600	
	Debtors	38000	
	Stock	<u>42800</u>	
	Total Current Assets		99000
	Less Current Liabilities:		
	Bank loan interest owing	5400	
	Expenses owing	800	
	Creditors	<u>22800</u>	
	Total Current Liabilities		<u>29000</u>
	Working Capital		70000

c. TWO examples of problems a business may have if there is not enough working capital are:

i. Business will not be able to capitalise on cash discounts since creditors may not be paid on time.

ii. There is always the likelihood of the business not being in a position to benefit from profitable business opportunities at convenient time.

d. The sole trader can at any time:

1. Bring in additional capital in the form of cash; this allows for capital to increase as well as cash-in-hand, resulting in working capital being increased.

2. Increase the amount of his working capital by taking a longterm loan, which allows additional flow of cash in the business, thus increasing working capital.

This is where we end for this week. Join us next week as we continue to complete the syllabus. Grasp the concepts and retain them; you will need them as you progress to excellence. See you next week.

Roxanne Wright teaches at Immaculate Academy. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:chemistry

Application of electrolysis

FRANCINE TAYLOR-CAMPBELL Contributo

Electrolysis is used commercially to extract reactive metals such as sodium and aluminium from their ores.

Electroplating and corrosion protection uses the principle of electrolysis

Pure metals can be obtained using the process of electrorefining.

ANODIZING

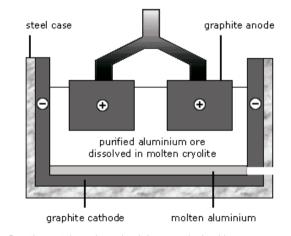
Anodizing is a process of producing corrosion-resistant articles by coating. The anode in this cell is an aluminium object and the electrolyte solution, such as dilute sulphuric acid, is one which can liberate oxygen at the anode.

At the anode: OH- ions are discharged.

 $40H^{-}(aq) \rightarrow 2H_{2}O(I) + O_{2}(g) + 4e$

The oxygen liberated at the anode reacts with the aluminium object to form a protective oxide coating of aluminium oxide (Al_2O_3) , which is resistant to corrosion.

ELECTROLYSIS OF ALUMINIUM OXIDE



Reactive metals such as aluminium are obtained by electrolysis. The metal ions are reduced by gaining electrons. The molten aluminium is tapped off.

Cathode: $AI^{3+} + 3e = AI(I) - reduction$

Anode: $20^{2-} = 0_2 + 4e$

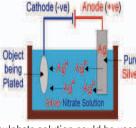
Comment: The carbon anodes gradually wear away when it reacts with the oxygen produced.

ELECTROPLATING

This is the process of coating an object with a thin layer of



another metal by electrolysis. This can be used to prevent corrosion and to make the object more attractive. In this process, the object to be coated is the cathode and the metal to be used Plated for coating (plating) is the anode. For example, to add a



nickel plate to an object, a nickel sulphate solution could be used as the electrolyte.

ELECTROLYTIC CELL FOR ELECTROPLATING AN OBJECT

At the cathode: The object or metal to be coated (plated) acts as the cathode. For example, in nickel-plating, nickel ions are discharged and deposited on the cathode or object, thereby coating it.

 $Ni^{2+}(aq) + 2e \longrightarrow Ni(s)$

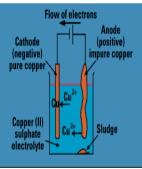
At the anode: If the object is to be nickel-plated, then the anode must be made of nickel. The nickel will, therefore, dissolve to form nickel ions

Ni (s) cathode \rightarrow Ni²⁺ (aq) + 2e

Comment: If the object is to be chrome-plated or silver-plated, then a chromium or silver electrolyte solution is used and the anode is made of chromium or silver.

PURIFICATION OF COPPER

The purity of copper can be improved by electrorefining. In this case, the same principle of electroplating or electrodeposition is used. The electrolyte is a solution containing copper ions such as copper sulphate. The cathode is a strip of pure copper and the anode is a lump of the impure copper.



Assana

her list.

ELECTROLYTIC CELL FOR PURIFYING COPPER

At the anode: Copper atoms from the impure copper dissolve to form copper ions. This causes the anode to decrease in size.

 $Cu(s) \longrightarrow Cu^{2+}(aq) + 2e$

Impurities fall off the anode and are collected in the cell.

At the cathode: Cu2+ ions migrate towards the cathode, where they are deposited on the cathode as solid copper. $Cu^{2+}(aq) + 2e \longrightarrow Cu(s)$ The cathode becomes thicker (increases in size).

Francine Taylor-Campbell is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerim.com

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being

yl:biology

Man's relationship with the environment

MONACIA WILLIAMS

"We can never solve our problems with the same thinking we used when we created them." – Albert Einstein

ELLO AGAIN, students. How are you this week? I hope last week was for you an enjoyable one and that this week has been good so far. Last week, we looked at some special relationships between organisms. This week, we will begin to look at the relationship that man has developed with his environment. Unfortunately, this relationship has not proven to be a good one in most instances. Many times, we fail to think about the impact that our actions may have before we carry out the action.

Why is it necessary to think about and study the impact that our activities may have on the environment? The earth's resources are finite, meaning that they will not last forever, and the human population is increasing at an alarming rate; also, individuals are enjoying longer lives. This increasing human population makes greater demands on these finite resources, hence, measures need to be implemented to preserve the resources that already exist. Can you imagine that for every one person who was alive in 1830, there were six alive in 2005? It is 2018; can you imagine the numbers now? How did this come to happen, you say? Well, think about it, living conditions have improved since then, haven't they?

Agriculture has improved, causing people to be better fed.
 Public health has improved, providing better and cleaner

water supplies and better sanitation.

■ Many diseases have been eliminated or are now being controlled, causing fewer children and adults to die from these diseases.

- People are living longer. In developed countries, the average life expectancy for men is 68 years and for women it is 73 years.
- All of the above factors have contributed to the tremendous numbers of individuals now sharing the planet Earth.

The earth's resources supporting the population fall into two groups:

- Renewable
- Non-renewable

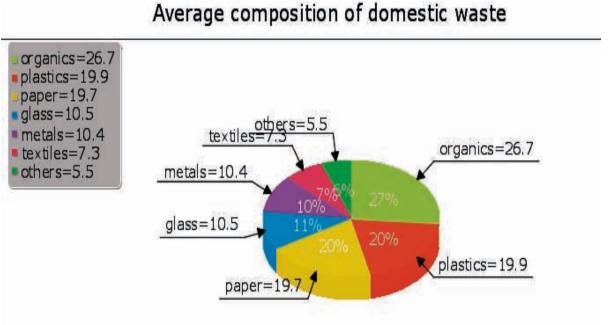
Let us take a look at renewable resources.

Renewable resources are those resources which can be reused or replaced over a short time, for example:

■ Soil – can remain renewable if it is properly cared for and erosion is prevented.

■ Biotic resources – food and trees can last if they are handled with proper care and management.

■ Water resources – remain renewable as long as pollution is prevented.



NON-RENEWABLE

Non-renewable resources are those resources which are in limited supply and once used, take many years to be replaced, for example:

 $\blacksquare Minerals - once removed from the earth, they cannot be replaced.$

■ Fuel resources – Fuels that originate from fossils are nonrenewable. Energy is used for every form of human activity. Formerly, the energy sources used were all renewable – wind, water and firewood. With continued development, fossil fuels – coal, oil and natural gas – became the energy sources.

How, then, can we conserve the resources that we now have? Non-renewable resources will eventually run out. In order to preserve them for the use of future generations, we need to practise the three 'Rs':

- Reduce
- Reuse

■ Recycle any of these resources that are to be found in discarded manufactured materials. These include paper, glass, metals, plastics and textiles. These are materials that are used in all aspects of life – at home, work, school, and for entertainment.

Increasing population numbers also means an increase in the amount of waste generated from the use of these resources. The pie chart above gives the approximate composition of domestic waste. The table below the pie chart shows the four major types of material mentioned above, their sources and their uses. Table showing manufactured materials, their sources and their uses. Some materials, when they are discarded, break down into

Manufactured material	Source	Uses
Paper	Pulp from wood	Writing, printing, wrapping
glass	Molten mixture of soda ash, silica, sand and lime	Bottles, windows, doors, drinking utensils etc.
metals	Iron, gold, tin, aluminum	Cars, ships, buildings, containers, cooking utensils
Plastics	Petroleum	Bottles, bags, containers, kitchen utensils, fibres etc.

simple, harmless forms. They do this with the help of microorganisms. Do you remember these organisms? The materials that can be broken down are said to be biodegradable and include materials that are organic in origin, e.g., paper, some textiles.

Other materials are classified as non-biodegradable. These either cannot be broken down or take a very long time to break down. These include glass, plastics, metals, and some textiles. The fact that these are non-biodegradable causes them to accumulate in the environment, leading to pollution of both soil and water.

Next week we will look at the three 'Rs.' See you then!

Monacia Williams is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:geography

Practical skills and field study

FOCUS QUESTIONS

- What are bar charts and the types that exist?
- How does one construct a climate graph?
- What are dot maps and how are they used?

BAR CHARTS

Bar charts, or bar graphs, represent data as vertical blocks or columns.

The X axis shows what type of data each column represents, and the Y axis shows a value for that type of data. For example, in a rainfall graph, each column on the X axis represents a month of the year, with the height of each column on the Y axis showing the amount of rainfall in that month.

TYPES OF BAR CHARTS

COMPOUND

It is possible to split each column into sections to show the breakdown of data.

COMPARATIVE

It is also possible to compare two sets of data on a bar chart – for example, measuring rainfall in two countries over the same period. This type of bar graph is called a comparative bar graph.

Climate graphs are a combination of a bar graph and a line graph.

Temperature is shown on a line graph, with the figures being shown on the right side of the graph. Rainfall is shown by a bar graph, with the figures being shown down the left side of the graph.

HOW TO CREATE A CLIMATE GRAPH

- Step One: Draw on three axes.
- Step Two: Add months to the X axis.

Step Three: Add temperature to the left hand Y axis temperature in °c.

Step Four: Add rainfall to the right Y axis - temperature in °c; rainfall in mm.

Now you're ready to add the data! (You do need to look at your

data before to work out what size your axis needs to be!) Step Five: Add your rainfall data - temperature in °c; rainfall in mm.

Step Six: Add the temperature line – temperature in °c; rainfall in mm

INTERPRETING CLIMATE GRAPHS

In the exam, you may be asked to look at the information in a graph and describe the area's climate.

1. Look for patterns in the temperature data.

■ Is the temperature the same all year round?

■ If it is different, how many seasons does the location experience?

■ Which season is the warmest?

■ Is it warm (10 to 20°C), hot (20 to 30°C) or very hot (above 30°C)?

■ Which season is the coolest?

■ Is it mild (0 to 10°C), cold (-10 to 0°C) or very cold (below 0°C)?

■ What is the range of temperature? ■ (Subtract the minimum temperature from the maximum

2. Look for patterns in the rainfall data

- Does the rainfall occur all year round?
- Check which season(s) is/are drier or wetter than others.

Then put the rainfall and temperature information together -

3. Describe the patterns in temperature and rainfall, including how they relate to each other. You now have a description of the climate.

DOT MAPS

A dot is a symbol, a circle of a small size. Dot maps show information as individual dots on a map. Each dot may represent more than one of something.

Dot maps show distribution and comparative densities of points on a map for quick interpretation. Dot maps can be used to represent a wide range of items like:

- Population
- Customers
- Sales opportunities
- Orders

Let's focus on the use of dot maps to show population



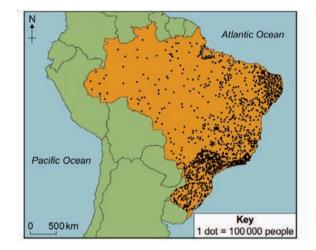
Population distribution describes the way people are spread across the earth.

DOT MAPS ARE:

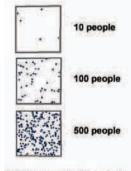
■ Used primarily to express distribution of discrete quantitative characteristics, especially point phenomena.

■ The distribution of points on a map represents the distribution of the given phenomenon in reality, and also shows the change in the intensity or dispersion.

- So this distribution is:
- Uneven
- Subject to change



Dot maps rely on a visual scatter to show a spatial pattern.



1 dot represents two people

In a dot map, each dot represents a fixed number of observations.

Send questions and comments to kerry-ann.hepburn@gleanerjm.com

temperature).

- What is the pattern of the rainfall?
- What is the total annual rainfall?
- Add each month's total to get the annual total.

what does it tell you about this area?

yl:social studies

Government at work

MAUREEN CAMPBELL Contributor

WHAT IS THE FUNCTION OF A GOVERNMENT?

To govern means to rule with authority. The government is the elected body responsible for carrying out the day-to-day activities in a country. This is essential as individuals possess different ideas, aspirations and goals, often conflicting, and therefore need to be managed and controlled to prevent anarchy. Can you imagine people living without a government? Think about the chaos that would result. No rules, no justice system; people would be a law unto themselves. There comes into play the 'survival of the fittest'. Government is, therefore, needed to operate in the best interests of the citizens of the country which they govern. We are constantly in need of protection, both against internal and external forces; we do need a government to carry out the following functions in society:

1. **Fundraising**: A major function of government is to raise money in order to carry out its other functions. Revenue is raised through direct taxation (paid straight to government by the taxpayer) and indirect taxation (paid to an agency which then forwards it to government). (Research examples of direct and indirect taxation.) This may be done directly and indirectly: directly through PAYE, Pay As You Earn (income tax) and indirectly through property, and goods and service taxation.

2. **Maintaining international relations**: This is necessary to avoid conflicts or resolve conflicts, thus creating mutually beneficial arrangements in areas such as trade and business, with policies such as free movement of goods, services, skills and labour . There is also the exchange of ambassadors and the making of treaties and other agreements with other countries, which is carried out by the government.

3. **Defence:** Government is responsible for national security, providing for the protection of



Jennifer Lawrence is the maverick Dominika Egorova in Red Sparrow.

the country and its citizens from external aggression and internal threats. Countries will have to defend themselves both against internal dissenting forces and external hostilities. The government maintains an army to defend the country against such aggression.

4. **Employment:** Employed people contribute to productivity and generate income for themselves, other parts of the economy, and for government through taxation. There is also the creation of job opportunities for the labour force through developing small businesses, special research and development, job training, foreign and local investment.

5. **Protection/Regulation of resources:** The government will be required to protect and regulate the sustainable use of natural resources, providing the basic infrastructure needed by citizens. This includes conservation of resources, building of roads, industrial estates, schools and hospitals to fulfil the needs of the citizens.

6. Enforcing and regulating fair and responsible business practices: This includes the careful monitoring and establishment of monetary policy. This should be geared towards giving consumers much-needed protection and regulating all other financial entities.

7. Determining and maintaining law and

order: This includes the making of laws which will regulate behaviour of the citizens and thereby promoting order and peace in the society. This will demand the employment of security forces to protect each citizen's life and property.

8. Provision of infrastructure and public

utilities: The government provides necessary social services, such as welfare and education, for the public good and for the well-being of the society as a whole. This will include welfare services, disaster relief, public parks, basic healthcare – especially preventative healthcare – affordable housing, public education and other public utilities such as water.

9. **Managing the finances of the country**: This is made possible by the annual budget and the specialization of the various ministries in the collection of revenue and the spending of money for the public's good.

CITIZENS AND GOOD GOVERNANCE

A citizen is a native or naturalised member of

a state or nation who owes loyalty to its government and is entitled to its protection.

CONSTITUTION

A constitution is a written document that gives details of the essential principles that direct the governance of a country. This document contains the basic protections, rights and freedoms to which all citizens of a country are entitled.

■ The constitution of a country, therefore, entails rules that govern how a government is expected to exercise power over the general public and how to deal with other countries on behalf of a country.

A constitution identifies who or what institutions should exercise power and how they should do it.

■ It also outlines the rights and responsibilities of citizens. It clearly outlines that the government is the most influential and coercive force within a country, so the rules about how a government should exercise power over its citizens are very carefully laid out.

Therefore, the main purpose of a constitution is to prevent a government from abusing its power over the people of the country, and to ensure that the government exercises its power as the people wish.

ACTIVITIES

1. Define the following terms: constitution, citizens, libel, slander.

2. State five reasons why government is necessary.

3. Suggest other institutions that can assist in carrying out any three identified functions of government.

4. List some areas where government directly employs people.

5. Why does a country send out diplomats to other countries?

6. How can a nation resolve disputes with other countries?

Maureen Campbell teaches at St Hugh's High School. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:history

Immigration schemes – Part 1

DEBBION HYMAN Contributor

1. Name four countries from which British Caribbean planters sourced labourers in the post-emancipation period.

2. Discuss the push and pull factors that led to the migration of liberated Africans and Europeans to the Caribbean in the 19th century.

THE EUROPEANS

Due to a decline in the white population, planters sought European immigrants to increase the size of the white population. It was hoped that Europeans would set an example of industry to ex-slaves and, as well, eventually develop into a middle class. They would settle on available land in the interior, thus forcing exslaves off the land and back to the plantations. Jamaica imported the largest number. Europeans also went to Trinidad, British Guiana and St Kitts. These immigrants were mainly Scots, Irish, French and Germans. They were recruited under a bounty system.

PROBLEMS WITH EUROPEAN IMMIGRATION

Europeans were unsatisfactory as most died shortly after they arrived. They died from tropical diseases, heat stroke, and many drank themselves to death. They also refused to work on the plantations with blacks. Many asked to be sent home or migrated to the United States. Planters also failed to supply proper food, shelter and medical facilities.

THE PORTUGUESE

Madeirans were attracted to the higher wages being paid in the Caribbean. They primarily went to British Guiana and Trinidad, and a few to the Windward Islands. They were brought in by government bounty. Most came during periods of famine in Madeira (1846-1847). Their numbers decreased after 1847 until the scheme ended in 1882.

PROBLEMS WITH MADEIRAN IMMIGRATION

The Madeirans died in large numbers. They suffered severely from yellow fever, malaria, overwork and inadequate food. The scheme was very irregular and most of them went into trading as soon as their contracts ended. In addition, the Madeiran government objected to the scheme, since so many of its citizens were leaving, and implemented measures making it difficult for their recruitment.

THE AFRICANS

There were two distinct groups of Africans that were used as labourers in the post-emancipation period. These were the free



Africans and the liberated Africans. The free Africans were persons who willingly opted to come and work on the plantations in the Caribbean. The liberated Africans were persons freed by British naval personnel from vessels illegally transporting them to the Caribbean as slaves.

FREE AFRICANS

Attempts were made to obtain Africans from the Kru Coast and Sierra Leone. The British government was reluctant to grant approval of this scheme as it seemed to be a revival of the slave trade. However, in 1840, approval was granted; at first, they were recruited privately, but the British government assumed direct control two years later.

PROBLEMS

1. Many who came to the Caribbean did not remain on the plantation; rather they followed the ex-slaves and settled on lands and became peasant farmers.

2. Very few Africans were willing to come to the Caribbean.

There were no catastrophes in Africa which would make them leave.

LIBERATED AFRICANS

The largest number of Africans who came to the British Caribbean were 'rescued' by the British Navy from slave ships bound for Cuba and Brazil. These Africans were forcibly indentured for up to five years in the Caribbean, primarily in British Guiana, Trinidad and Jamaica.

PROBLEMS

The number of liberated Africans was too small to make a difference to the labour situation. This scheme ended when Cuba and Brazil abolished slavery in 1866 and 1888, respectively. Like the blacks, they abandoned the estates and settled on land.

Debbion Hyman is an independent contributor. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:english language

Short story writing tips

MELISSA MCKENZIE Contributor

ELLO, STUDENTS! This week, I will go through a few tips with you that you can use to improve your story-writing skills. The first thing I am going to share with you is a checklist you can use as you brainstorm and plan your story-writing ideas.

CHECKLIST FOR CXC SHORT STORY WRITING

- 1. What is the story going to be about?
- 2. What is the theme of the story?3. Who are the characters? How will they behave? How will other characters react to them?

4. Where will the events in the story take place?

- 5. Will any special techniques be used in the story, such as a flashback, twist and so on?
- 6. How will the story begin?7. What is the problem in the story? What is

the conflict?

8. What are the actions in the story?9. How will the story be resolved?10. What is the title of the story?

NOTE: These are questions that should be borne in mind as you seek to create a story that will wow your readers.

Understandably, writing a story requires a certain level of skill and imagination, but it is a task that anybody can undertake if attention is paid to what the examiners at CXC are looking for. The story that you produce in the English A exam must:

- Establish a setting.
- Introduce and develop characters.
- Narrate the sequence of events in a
- realistic and unified manner. ■ Include conflict/tension/problem/
- suspense.
- Conclude in an interesting and realistic way.
- Use language effectively.

■ Apply the given stimuli (the picture and sentence prompt) appropriately.

"Develop a passion for learning. If you do, you will never cease to grow." – Anthony J. D'Angelo

AVOID THE FOLLOWING

- Multiple settings (with only 400-450 words to work with, stick to one).
- Overusing dialogue (it should be purposeful, not merely there to function as a
- word count filler).
- person or third person, not both).

Tense inconsistency (narrating in the past tense is the safest course; any tense can be used in dialogue).

■ Lacklustre openings. Start with a sentence or sentences that grab the readers' attention immediately.

Now let us briefly look at how you can narrate a story.

Consider the sentence prompt below.

Prompt: Jean could not believe her eyes. He had returned after all these years. Write a story which begins with these sentences.

Below, I have provided you with an example of an ineffective way to narrate a story:

Jean could not believe her eyes. He had returned after all these years. She walked towards him and asked him what he was doing here and he told her that he was sorry for leaving the way he did so many years ago. She told him to go away and he asked her to give him another chance and she said no and she walked into the house.

You will note that the setting has not been established, the thoughts/feelings of Jean have not been engaged and descriptions of the 'he' character are missing.

Here is a better way of narrating the events above.

Jean could not believe her eyes. He had returned after all these years. The last time she had seen him, she had watched him walking out the door with tears streaming down her eyes. Jean remembered the pain she had felt and the blame she had attached unto herself. If she had been a better wife, he would not have left her. Now here he was, her prodigal husband, David. He stood at the front gate, a lesser version of himself. His hair that had been full and a lustrous black was now thinning. His oncehandsome face looked worn and wrinkled. He looked gaunt, defeated. For some reason she felt pity and wondered about his reason for being here. He smiled weakly and beckoned to her. She moved from her front garden and strode towards him. resolved to share the rejection she knew he deserved.

Please note that the thoughts of the main character are engaged, and the reader is provided with pertinent descriptions of David. You are encouraged to develop your stories in this way. It takes practice, but it can be done.

Below, I have also provided a simple story that has all the elements of a narrative. Read it and identify them.

Lying on the couch waiting for my children to come home, I must have dozed off, for soon I was in a strange land inhabited by teenagers, including my own.

I hastened to look at their rooms. Something was wrong! They were tidy beyond belief. Clothes were on hangers! Shoes were neatly arranged in pairs! The floor was not littered with dirty socks! Naturally, I looked to see if there were wet towels on the beds. I couldn't find one!

The teenagers still played their favourite music, but they played it so softly that elsewhere in the house it was possible to carry on a conversation. And whenever they used the telephone it was for short calls. In fact, I overheard my daughter saying, after speaking for only two minutes, "I'm sorry Jill, I must hang up. I've been on the phone too long."

Soon it was dinner time. The food was macaroni and string beans. Someone, I felt, was certain to say, "That again?"

Instead, they ate with glee. All of them; all of it. There were many questions that I would have loved to ask these strange children but, because they all were anxious to begin their homework, they scampered off.

- Just then someone touched me on the shoulder and I awoke.
 - "What's for dinner mom?"
 - "Macaroni and string beans."

"Aw, mom! Why do we have to eat the same thing every day?"

You should have noted the following: ■ A plot.

■ The setting (at a house – the reader is taken through the living room, children's bedrooms and dining room).

■ Characters – the narrator (the mother) and her children.

- Point of view (first person).
- Use of dialogue.

■ An element of suspense (the reader is wondering what is really going on and how the story will end).

The twist at the end (it was all a dream).

Next week, I will take you through the mental processes of writing a story.

VOCABULARY TOP-UP

Metamorphose – change from one state or thing to something different.

Meticulous – very careful about details, thorough.

mercenary – motivated by greed or the desire for gain.

 $\label{eq:multiplicative} \begin{array}{l} \mbox{Mundane} - \mbox{everyday, ordinary, and therefore} \\ \mbox{not interesting.} \end{array}$

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yl:english literature

'A Contemplation Upon Flowers'

BERYL CLARKE Contributor

Some TIME has passed since we last discussed A Contemplation Upon Flowers, so you have had time to read and re-read; in other words, to contemplate the work set in the past lesson. I am sure that you found it worthwhile to spend time on this poem for it is packed with information.

The speaker begins by complimenting the subject: flowers. So great is his admiration that he uses the word 'gallant', which is both an adjective and a noun. In this way, he gives the word strength and force in order to emphasise his appreciation. In addition, he remarks that flowers are not conceited, they do not think too highly of themselves. He declares that he wishes that he could be like them on both counts, that is, courageous and yet not 'stuck-up'! He explains further when he says that when flowers emerge and attract attention (with their beauty), they make no problems; rather, they quietly return to the earth, from which they came, after they are seen; after they have unselfishly performed the roles assigned to them. There is the suggestion at this point that the flowers do not feel important for they know that the earth is the source of their beauty (embroidered garments) and so growing, blooming, fading, withering and then becoming a part of the earth once again is taken as natural and create no cause for concern to them.

The speaker now comes to a point that seems very important to him as he continues to contrast the flowers' attitude, this time to death. For him, the flowers follow life's cyclical pattern cheerfully, without any regret, while he yearns to remain youthful, never to grow old, never to die, and not even to contemplate the fact that death exists. So he next appeals for a lesson. He wants to learn how not to fear death, because he realises that he cannot escape from death; he calls it "my bed of earth". (Bear in mind that flowers are planted in earthen 'beds'.) His desire is to get to the position where he can smile at death, where he can make an agreement with death. Do you see the significance of that statement? In order to do so, you must know the meaning of the word 'truce'. Look it up and you will find that it means"a temporary agreement to cease hostilities". This, therefore, tells us that he feels that he is at war with death and is uncomfortable about it. Why do you think I say that? I do so because if he were not, he would not sound so anxious to be like the flowers and would not be talking about a truce.

In the last four lines, our speaker brings the flowers, which he respects, face to face with death, which he fears. The influence of the flowers is great, for here he sees them as displaying no fear. They look good; they brighten up the funereal atmosphere and make the place smell fragrant. We, Jamaicans, would say 'sweet'. The flowers are dying, but they do fulfil their purpose anyway, and



Students from B.B. Coke High School, Junction, St Elizabeth, pose for a picture after school.

this is the attitude the speaker wants to achieve. He wants to be able to approach death as if he is approaching a friend, sweetly and with confidence. He hopes that he will have the attitude to life and death, and acceptance of death, that will brighten his passing.

Take a close look at the poet's style. Consider the rhyming pattern, the euphemism, the run-on lines, the use of the colon, the conversational tone, the couplet with which the poem ends, and the fact that there is only one full stop used in the whole poem. I hope you will notice that there are more than one set of rhyming couplets. Please find them and think of the reason for their use. I

NORMAN GRINDLEY/CHIEF PHOTO EDITOR

NORMAN GRINDLET/CHIEF PHOTO EDITOR

would like you to notice, too, how the seasons are used as symbols. Is there any personification, and if there is, what is its

purpose in the poem? Has this lesson assisted in your understanding of this work? I would really like to think that it has. By the way, does it surprise you that a bishop wrote this?

Have a safe and successful week, and God bless!

Beryl Clarke is an independent contributor.Send questions and comments to kerry-ann.hepburn@gleanerjm.com

yl:information technology

Flow charts

NATALEE A. JOHNSON Contributor

OOD DAY, students. This is lesson 21 in our series of lessons. In this week's lesson, we will look at how to represent an algorithm graphically and control structures.

A flow chart is a graphical representation of an algorithm. It uses special geometrical objects to designate the basic steps of a program, which are:

1. A PARALLELOGRAM

This is used to represent both input and output operations.



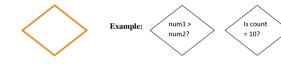
2. A RECTANGLE

This is used to represent a processing/assignment statement



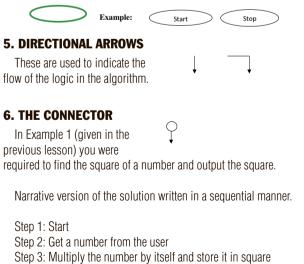
3. A DIAMOND

This is used to represent a decision (if-then-else and loops) and control structures.



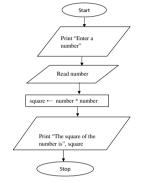
4. AN ELLIPTICAL SHAPE

This is used to represent the terminal indicators, START or $\ensuremath{\mathsf{STOP}}$



Step 4: Display square Step 5: Stop

This is the flow chart version of the Square_of number algorithm.



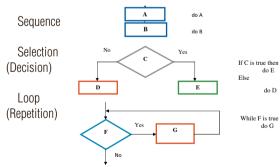
Let us now look at the control structures and ways of representing them with a flow chart.

CONTROL STRUCTURES

SEQUENCING

As mentioned in the previous lesson, sequencing is a part of any programming structure. Sequencing involves writing a set of instructions in the intended order you wish to solve a problem. Additionally, this is where the program is viewed in a simple topto-bottom manner, from the input statement to the end of the program. Each line of the algorithm will be executed once (See Narrative example above written in a sequential manner).

Before we look at the selection statement, below are examples of how the various control structures are depicted in a flow chart.



SELECTION/CONDITIONAL STATEMENTS

In our everyday lives, we make simple decisions and important decisions. These decisions that we make are normally based on a particular condition. For example, if school is being kept, you will go to school; if school is not being kept, you will stay home, also

if you are feeling sick. The decision will be made based on the condition of whether or not 'school is being kept' or 'if you are feeling sick'.

THE 'IF' STATEMENT

The if statement is a conditional statement. It causes execution of some statement to depend on the truth-value of a certain condition, given as a Boolean expression. A Boolean expression is an expression that results in a value that is either true or false. For example, the expression 2 < 9 result would be true because the number 2 is indeed less than the number 9.

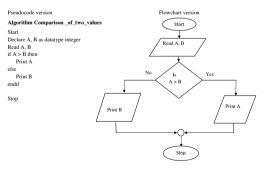
The 'if statement' structure begins with an 'if' and ends with the word 'endif'. If the condition is true, then the statements immediately after 'then' are executed; if it is false, then the statements after 'else' are executed, provided that the 'else' clause is present. See examples below.



Let us look at a pseudocode algorithm that will show sequencing and selection as well as the flow-chart version of the program.

Example 3

Write a pseudocode algorithm to read two numbers and to print the value of num1 if it is greater than num2 else print num2.



We have come to the end of this lesson. See you next week when we will continue to look at control statements. Remember, if you fail to prepare, you prepare to fail.

Natalee A. Johnson teaches at Ardenne High School. Send questions and comments to kerry-ann.hepburn@gleanerjm.com

Coordinate geometry

CLEMENT RADCLIFFE

E WILL continue the review of coordinate geometry with problems in the Cartesian plane. If I may, I will begin with the homework given last week.

HOMEWORK

A straight line, K, passes through the point
 M (4, 1) and has a gradient of 3/5.
 ■ Determine the equation of this line.

Given that the line segment MP is

perpendicular to K, determine its equation.

SOLUTION

Given K, the line which passes through the point (4, 1) with gradient (m) 3/5, then the equation is given by: $y - y_1/x - x_1 = m$ Substituting, y - 1/x - 4 = 3/5Simplifying, 5y - 5 = 3x - 125y - 3x = 5 - 125y - 3x = - 7Answer: 5y - 3x = - 7

Let m1 be the gradient of the perpendicular, $m_1 \times m = -1$ $m_1 \times 3/5 = -1$ $m_1 = -5/3$ and it passes through (4, 1)

The equation is: $y - y_1 / x - x_1 = m$ y - 1/x - 4 = -5/3Simplifying 3y - 3 = -5x + 20. 3y+5x = 23. Answer: 3y + 5x = 23

2. A straight line MN cuts the y axis at M(0 , 2). The gradient of MN is - 3 . Show that the equation of the line MN is y + 3x = 2

SOLUTION

The line therefore has gradient - 3 and intercept 2, using the equation y = mx + c and substituting. The equation is y = -3 x + 2 y = -3 x + 2 or y + 3x = 2

3. A straight line is drawn through the points A(- 5, 3) and B(1, 2).
(i) determine the gradient of AB.
(ii) write the equation of the line AB.

SOLUTION

Given the points A(- 5 , 3) and B(1 , 2), then (i) Gradient of AB, $m = y_2 - y_1/x_2 - x_1$ = 2 - 3/1- -5 = - 1/6 m = -1/6

(iii) Since the gradient of AB = -1/6, and AB passes through the point (- 5 3), then the formula for finding the equation of AB is:

y - y1/x - x1 = m. Substituting the coordinates of the point (- 5, 3) y - 3/x - 5 = - 1/6

y - 3/ x + 5 = - 1/6. Clearing, 6(y - 3) = -1(x + 5) 6y - 18 = -x - 5 6y + x = 18 - 5 6y + x = 13Answer: 6y + x = 13.

It is clear from the above that you need to study the various methods of finding the equation of a line by being competent in identifying the appropriate formula. Having done this, you are only required to select and present the formula and perform effectively the required substitution and clearing.

As we continue to review problems in the Cartesian plane, I wish to remind you that, in some instances, you are given information which enables you to find a point on the line and the gradient of the line. This information is then used in the appropriate formula.

EXAMPLE

■ Given the points A (2, 3) and B (6, -1), determine the equation of the perpendicular bisector of AB and state the coordinates of the point at which the perpendicular bisector meets the y axis. Given the points A (2, 3) and B (6, -1), the gradient of AB = $y_2 - y_1 / x_2 - x_1$ = -1 - 3 /6 - 2

= - 4 /4 = - 1

Let the gradient of the line perpendicular to AB be m m x - 1 = - 1 (product of the gradients of

perpendicular lines is - 1) m = 1

The midpoint of AB is $M = x_2 + x_1/2$, $y_2 + y_1/2$ Substituting the coordinates of the points, M = 6 + 2/2, -1 + 3/2 = 8/2, 2/2 = (4, 1)

The perpendicular bisector of AB has gradient 1 and passes through the point M (4 , 1).

The equation of the perpendicular bisector is found using the formula: y - y₁/x - x₁ = m y - 1/x - 4 = 1 Clearing,

y - 1 = x - 4y - x = 1 - 4 = -3

The equation of the perpendicular bisector is y - x = -3.

At the point where this line cuts the y axis, x = 0.

Substituting, y - 0 = -3y = -3The coordinates of the point is (0, -3). The line cuts the y axis at (0, -3).

Remembering the numerous poor attempts made on this topic in past examinations, I am recommending that you do conscientious review of this topic.

Let us now attempt the following together.

The coordinates of A and B are (3, - 2) and (7, 0) respectively. X is the midpoint of AB. (a) Calculate

(i) the length of AB.(ii) the gradient of AB.(iii) the coordinates of X.

(b) Determine the equation of the perpendicular bisector of AB and state the

coordinates of the point at which the perpendicular bisector meets the y axis.

yl:mathematics

SOLUTION

(a) (i) the length of AB AB² = $(7 - 3)2 + (0 - 2)^2 = 4^2 + 2^2 = 20$ the length of AB = $\sqrt{20}$

(ii) the gradient of AB Gradient of AB or $m = y_2 - y_1 / x_2 - x_1 = 0 - -2/7 - 3 = 2/4 = 1/2$ m = 1/2

(iii) the coordinates of X the midpoint of AB or $M = x_2 + x_1/2$, $y_2 + y_1/2$ M = 7 + 3/2, 0 + -2/2 = (5, -1) M = (5, -1)

(b) Since the gradient m of AB is 1/2
 ■ The gradient of the perpendicular to AB = - 2.
 (N.B. 1/2 x -2 = -1)

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Since the bisector of AB passes through (5, -1), the midpoint of AB and has gradient - 2,

The equation is found by using the formula: y - y_1/x - x_1 = m
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By substituting: y - 1/X - 5 = -2 Clearing, y + 1 = -2 x + 10 y = -2 x - 1 + 10 y = -2 x + 9

Now for your homework.

The coordinates of the points L and N are (5 , 6) and (8 , - 2), respectively.

1. (i) State the coordinates of the midpoint, M, of the line LN.

(ii) Calculate the length of the line LN.(iii) Calculate the gradient of the line LN.

(iv) Determine the equation of the straight line which is perpendicular to LN and which passes through the point, M.

2. The line, L, joining the points (x , 2) and (3 , - 1) has gradient - 3/4. Determine:

(i) The value of x

(ii) The coordinates of the midpoint of the line joining the point (5, 6) to the point (3, -1) (iii) The equation of the line perpendicular to the line represented by y = x + 3 and passing through the point (3, -1)

CONTINUED ON PAGE 24

yl:communication studies

TRUDI MORRISON REID

AST WEEK, we looked at an actual listening comprehension passage and some multiple-choice questions from Section A. This week, we will look at some more questions from the multiple-choice paper.

The instructions for the multiple choice should look something like this:

READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test consists of 45 items divided into two sections, A and B.

2. Section A, based on a communication extract, consists of 7 questions. The extract, which is NOT included in the question booklet, will be read to you twice, but you will be allowed two minutes to look at the questions before the extract is read to you.

3. Section B consists of 38 questions. Answer each question based on the information given.

4. In addition to the test booklet, you should have an answer sheet.

5. 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.

6. On your answer sheet, find the number which corresponds to your item and shade the space having the same letter as the answer you have chosen.

7. If you want to change your answer, erase it completely before you fill in your new choice.

8. When you are told to begin, turn the page and work as quickly and as carefully as you can. If you cannot answer an item, go on to the next one. You may return to this item later.

SECTION B

Items 8-11

Instructions: Read the following scenario carefully and then answer items 8-11.

UNCLE JERRY'S TEES FUNDRAISING THAT'S FUN RAISING

Why do some school fundraisers and other fundraising projects fail to reach their goals? In many cases, it comes down to the products. We've all been there?in a position where we feel obligated to buy a fundraising product because it's for a good cause even though, in reality, we will never use or enjoy that product. However,

Multiple choice



Movements Dance Company of Jamaica performing Bread of Life, choreographed by artistic director Monica Campbell McFarlane.

when you offer products that have

5 broad-based appeal? That buyers are actually enthusiastic to purchase? Your chances of success skyrocket. At Uncle Jerry's Tees Fundraising, we are proud to carry fundraiser products that people will be happy to buy, not only because they will be contributing to a good cause, but because they actually like what they are getting.

Retrieved and adapted from http://www.unclejerrystees.com.

- 8. Which of the following expresses the meaning of 'broad-based appeal' in line 5?(A) It uses rhetorical language.(B) Intensive demand.(C) Far-reaching popularity.
- (D) Widespread attractiveness.
- 10. Which of the following factors is NOT true about the extract?
- (A) Popular request.
- (B) It is a primary source of data.
- (C) The writer seems to be knowledgeable
- about fundraisers.
- about fundraisers.

9. The purpose of Uncle Jerry's Tees
Fundraising message is to:

(A) Entertain the online reader.
(B) Supply information on products that people will buy.

(C) Convince readers to buy his products.

(D) Persuade readers to go into fundraising.

11. Which of the following literary devices is used in the title of the extract.(A) Pun(B) Metaphor(C) Assonance(D) Oxymoron

Items 12-15

Instructions: Select the most appropriate answer for items 12-15.

12. In the communication process, to encode:
(A) Speak to large groups of people.
(B) Block a pathway between the sender and

receiver. (C) Translate ideas into codes. (D) Interpret a code.

- 14. Feedback can come in the form of? means to?
- (A) Verbal and non-verbal responses.
- (B) Verbal communications only.
- C) Non-verbal communication only.
- (D) Environmental noise.

13.An example of physiological noise is (A) Humming air-conditioner unit.

- (B) A speaker using complex terms .
- (C) A lawnmower.
- (D) A listener planning his weekend in his mind.

15. The ability to communicate effectively (A) Depends on not using technology to send messages.

(B) Is a natural talent that cannot be learned.(C) Depends on the education level of those around you.

Next week we will look at some more multiple-choice items. Keep studying!

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yl:caribbean studies

Factors that hinder development

JASON MCINTOSH Contributor

GOAL

For students to evaluate how development in the region is influenced by political, economic, social, cultural, environmental and technological factors.

OBJECTIVE

1. Examine how development in the region is influenced by social, political, economic, technological and environmental factors.

POLITICAL IDEOLOGIES

Political ideology fosters fragmentation and makes countries vulnerable to external interference in domestic affairs of countries, for example, Grenada. It also limits the extent to which countries are able to forge a coordinated foreign policy. On the other hand, the region has been able to maintain stable and democratic governments, which have provided opportunities for economic stability and favourable investment climate, for example, Barbados and the Eastern Caribbean states.

The political ideology that a government embraces can have a profound impact on development. The capitalist system, or free enterprise, is the preferred choice of most Caribbean states. This ideology is intricately connected to the world's capitalist system and, therefore. Caribbean states which embrace this philosophy receive a stamp of approval from the First-World countries of the world capitalist system. Caribbean countries which practise/embrace any other form of ideology (planned economic system) receive little or no support from the major capitalist countries of the world, and so they find it extremely difficult to embark on a development path: for example, Cuba (economic blockade by USA); Grenada, which embarked on a socialist path, was invaded by the USA in 1983 and the government was overthrown. Jamaica, under Michael Manley, was destabilized by USA and suffered great economic hardship because of its decision to pursue an ideology known as democratic

socialism in the 1970s.

DISTRIBUTION OF WEALTH

If wealth is unevenly distributed, then this can hinder development. When concentrated in the hands of a few, it can lead to a low level of investment, high unemployment, and a high level of unskilled labour force, as there is low expenditure on education. It can also result in corruption. As a consequence, there is low productivity among high-income earners, capital flight and brain drain. It leaves a government with a high borrowing rate from international sources, which results in higher taxation rate and rising inflation. To solve this, incentives for production have to be offered to attract investors, and government has to increase its involvement in areas such as infrastructure, development, education, minimum wage, high tax on luxury items, harsh penalties for offenders, better auditing and accountability.

Most countries of the Caribbean, especially Jamaica, display an inequitable distribution of wealth (skewed distribution). In Jamaica, it is skewed in favour of the ruling class, which consists of large land-owning families, local capitalists, international capitalists, and a small number of strategically placed professional managers. These classes of people in Jamaica control the commanding heights of the economy (in the 1970s, less than 1% of the population controlled 70% of the wealth in the economy. The majority of the wealth is concentrated in the hands of 21 families).

REPERCUSSIONS OF THIS FOR DEVELOPMENT

■ It facilitates some form of development (economic but not holistic). It facilitates enclaves.

■ It produces antagonism between workers and managers/owners.

■ It fosters alienation, which can lead to revolution if not addressed. People become alienated from the productive forces of the country because they enjoy very little of the wealth of the country and they are forced to pay burdensome taxes, like GCT. The most vulnerable in society also become hopeless, the majority of the people have no stake in the economic wealth of the country, and without a leader to speak for them, there can be no change.

CHANGING CLASS BOUNDARIES

If within society there are no avenues or scope for social mobility, then this can lead to antagonism, as people will see themselves as inferior or less important than those who occupy higher status. A rigid class structure breeds insecurity/mistrust, and this can have a negative impact on development. Some avenue for upward social mobility must exist to reward people who are industrious, visionary and productive.

GENDER INEQUALITY

Engendered inequality is a sore point in many counties across the world, despite the national and international measures that have been taken towards gender equality. Of the more than 135 nations, only four countries in the world have achieved gender equality: Cuba, Sweden, Norway and Cost Rica. For development to take place in the Caribbean society, a fundamental step in both human and economic programmes should be made a regional priority. Measures of gender equality include access to basic education, health and life expectancy, equality of economic opportunity, and political empowerment. Although there has been evident progress, many alarming issues regarding gender discrimination still prevail today. (Kamrany, Robinson, 2012).

NATURAL AND MAN-MADE DISASTERS

When disasters wreak havoc on Caribbean communities, whether

man-made or natural, the lives of the residents are affected in myriad ways. Such disasters cause both social and economic displacement, the environment is destroyed, landslides occur, soil is eroded, people are displaced from homes, utility poles are destroyed, and the productive sector is put on pause. This phenomenon affects the development of a country and, as such, governments have to make necessary changes to their development plans to provide immediate aid to those affected. Natural and man-made disasters not only have negative effects, but when they do occur, employment is generated as governments and their agencies engage in reflective planning for the social and physical plant of their islands. Infrastructural development also takes place, which includes the restoration, removal and building of new roads, bridges, buildings, and so on.

REFERENCE

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3. A is the point (- 3, 5) and B the point (3, - 1).
(i) Find the coordinates M, the midpoint of AB.
(ii) The gradient of AB.

I expect, as usual, that you will find more exercises of this nature in your textbooks and past papers. Please practise as many of them as you can.

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Students of Tivoli Gardens High School demonstrate the magic that is science to (from left) Hon Denis O Brien, Education Minister Ruel Ried, Hon Usain Bolt and principal Aldrick Durrant at the celebrations of renovations at the school recently. "Education is the passport to the future, for tomorrow belongs to those who prepare for it today."

– Malcolm X