

Mark Howard (back left), regional director for the Americas at the British Council, Courtney Campbell (back right), chairman of the Victoria Mutual Foundation Limited, with colleagues, students and staff at the Kingston Technical High School for the ribbon-cutting ceremony to mark the school's participation in the Social Enterprise in Secondary Schools Programme.

yl:office administration

HYACINTH TUGMAN

Byour examinations in other subject areas even as the reality of a major event in your school life is now taking place. If you are well prepared, no need to worry.

I will take some time to assist you in the preparation for your examination. It is always a good thing to know what to expect.

KNOW THE FORMAT OF YOUR EXAMINATION

You should know the format for your examination papers - Paper 01 consists of 60 multiple-choice questions and the time allotted is 1 hour and 15 minutes. This paper will test your knowledge and comprehension profile and the application profile will be tested in a ratio of 2:1.

PAPER 02

This is the essay paper. It will now consist of only SIX questions of which you MUST attempt all. (ALL QUESTIONS ARE COMPULSORY.) There will be no section for you to choose from. Time allotted for this paper is two hours. Your performance will be assessed in the areas of knowledge and comprehension profile and the application profile. Each question on this paper will be worth 15 marks.

PAPER 03/2

The alternative to the School Based Assessment (SBA) is primarily for private candidates. It takes the form of a written examination in lieu of internal assessment for school candidates. This paper will be based on the same area of the syllabus as the SBA component. The component of this examination is the case study. Time allotted for this paper is 1 hour and 30 minutes with an additional 15 minutes to read through the paper. Students will be required to answer 10 compulsory essay-type questions that are marked out of 50.

As a marker for office administration, I will share some weak areas that are evident in students' work:

■ Students fail to express themselves clearly – lack of clarity.

■ Failure to read over work carefully. This would have helped to eliminate some of the careless errors caused possibly by examination

Exam breakdown



RICARDO MAKYN/MULTIMEDIA PHOTO EDITOR

examination unless otherwise told.

From left: Courtney Campbell, chairman of Victoria Mutual Foundation; Travis Rowe Victoria Mutual Future Plan Scholarship recipient; Dionne Taylor Victoria Mutual volunteer and mentor in Social Enterprise in Secondary Schools programme; Travis Gordon, student of Barracks Road Primary in Montego Bay, St James; Rohan Bell, PTA president for Holy Childhood High School; and Kingston Technical student Dacia Sterling participate in a candle-lighting ceremony during the launch of the Victoria Mutual Foundation, held at The Knutsford Court Hotel in St Andrew.

stress.

■ Inability to complete forms correctly and neatly. Students make careless errors in transferring information from the question paper to the forms.

TIPS ON HOW TO APPROACH THE QUESTIONS

1. A booklet will be provided for you to write your answers. If the space provided is not enough, then there is extra space at the back of the booklet, but you MUST indicate this in the space provided.

2. It is recommended that you use a black ink pen to write on the question paper as these answers will be scanned.

3. Do read all the questions carefully before

making an attempt.

4. Make jottings of the questions you will attempt.

5. You can attempt your questions in any order.

 6. The marks given at the end of a question will indicate how much information is required.
7. Identify key words in questions, e.g., List

three activities relating to the recruitment of new employees – all that is required of you is to itemise the activities (the keywords here are 'list', 'three'); look out for other keywords as: identify, define, outline, advantages and disadvantages, difference between two documents.

8. Use assumed name given.

9. Use your time wisely throughout the examination.

10. If forms require a date, use the date of the

Express yourself in simple, clear language.
Do remember to leave a few minutes to read over.

It was a pleasure to be of some assistance to all you wonderful students. Good luck in your examinations as you strive towards your goal. I will leave you with this beautiful quote that I have cherished so much.

"Confidence is contagious. So is the lack of confidence." – Vince Lombard

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

Writing the external papers in principles of business

YVONNE HARVEY

Contributor

WW really there. The objective of this lesson is to outline the format of the final principles of business examination and to give you some examination tips. There have been some changes to the format of Paper 02 of the examination, so please note carefully.

PAPER 01

Paper 01 is the multiple-choice paper. It will consist of 60 items taken from across the three profile dimensions (1) Organisational Principles (2) Production, Marketing and Finance and (3) The Business Environment. You will be given 1 hour and 15 minutes to complete the paper. Each question will have four suggested answers. You are required to select what you consider to be the best answer and indicate it on the answer sheet provided in the way instructed. The multiple-choice paper is 30% of the overall marks.

PAPER 02

Paper 02 is the two-hour, structured/essay paper. As of the January examination 2017, this paper consists of five compulsory questions. It continues to be marked and so you are to write your answers in the spaces provided in the booklet. You will be given a specific number of lines to write your answers on beneath each question. Each question will be worth 20 marks. This paper is 50% of the overall marks.

Example: (a) What is a business plan? (2 marks)

You are advised to contain your answers to the number of the lines allotted to the question. Do not write below the lines provided, nor in the margins. If you do use any of the extra sheets of paper provided in the booklet, please indicate to the marker the page on which you have continued your answer and write the question and section of the question you are answering clearly on the extra sheets.

If you rewrite your answer, remember to draw a line through the original answer so that it will not be marked.

Read through the paper carefully and plan your answers.

Those of you in school systems will have already submitted your School Based Assessments (SBAs) for a possible 20% of the overall marks.

PAPER 03/2

Private candidates will sit Paper 03/2 in lieu of ,or as an alternative to, the SBA. This paper is also worth a possible 20%. The details of this paper can be found in the principles of business syllabus, pages 37-38.

You should have already begun studying for the exam. Studying well in advance of the date of the examination will allow time for adequate rest, meditation and exercise. I suggest that you begin with the topics found later in the syllabus and those topics that you find more difficult.

As you study for the POB examination, do NOT spread yourself too thin by studying too few topics. Remember that many of the questions may involve more than one topic. Endeavour, therefore, to study thoroughly as many topics as is humanly possible in order to enhance your chances of doing well in the examination.

Study in groups where possible, and have a bank of the most recent past papers so that you can practise answering questions. Additionally, the homework assignments that I presented in these lessons will prove useful.

Use INDEX CARDS to write down the main headings and points for each topic. These will serve as last-minute reminders just before you enter the examination room.

Always study with RESOURCE texts nearby to clarify areas of difficulty. Most texts also have questions useful for revision purposes.

Before you sit each examination, pray to God for guidance and arm yourselves with the appropriate writing implements. Take along extra pens and pencils. Arrive at the examination centre at least 15 minutes before the scheduled start of the examination. This will ensure that you have enough time to find your seat and get your minds ready for the examination.

Do NOT use this time to cram and confuse yourselves. You should remember, too, that cellular phones are not allowed in the examination room. You are not allowed to use them as calculators, either.

Listen to and follow the instructions given by the invigilators of the examinations and DO NOT PANIC.

Choose your questions wisely. Avoid questions where you can only answer, say one out of four parts. Read your questions carefully and note the verbs at the beginning of the questions. These will indicate to you exactly what you are required to do, e.g. list, suggest, explain, describe, analyse, etc.

Indicate clearly and accurately the sections and questions being attempted. Use the marks for each part of the question to guide you as to how much detail is needed for each part

> Finally, do not do anything to jeopardise the integrity of the centre where you are sitting your examinations. Anything that you are not sure of, ask the invigilator, not the person sitting beside you.

It is also important that you know and understand all the exam rules so that you do only what you know you should do.

The examination is on Friday, May 18, 2018, so it is just left for me to say that the sessions were very enjoyable and I wish each and every one of you all the very best. Remember that you will get out of it as much as you put in.

Yvonne Harvey is an independent contributor. Send questions and comments to **kerryann.hepburn@gleanerjm.com**

yl:principles of accounts

Sole trader and its adjustments

ROXANNE WRIGHT Contributor

T IS quite understandable that many candidates will feel anxious and nervous about examinations. However, I want to remind you that it is important to try very hard and overcome those feelings. There is no secret that thorough preparation for your examination, and remaining calm before you enter and while you are in the examination room are key components to your retaining and being able to reproduce what you have learnt over the study period. Therefore, I encourage you to prepare and be confident that you have completed your syllabus, worked several questions and are now ready to reproduce. This week, I will present a worked example. Pay keen attention to the principles applied.

WORKED EXAMPLE

The following balances were taken from the books of Paul Petro on September 30, 2016:

	\$
Rent received James Strawn	22080 Cr. 540 Dr.

The following transactions took place during the week ended September 30, 2016.

2016

Sept 25 James Strawn left the country and Saul decided to write off the balance on James' account as a bad debt.

Sept 29 A tenant paid \$2940 by cheque to cover his outstanding rent for September and one month's advance rent \$1440 for October.

You are required to prepare the following ledger accounts. 1. Make ANY necessary transfers to the profit and loss account and, where necessary, bring down the final balances.

- a. Rent received account
- b. Saul petal account
- c. Bad debts account

2. Explain why Paul Petro wrote off the balance on John Strawn account as a bad debt on September 27, 2014. State which accounting concept was applied.

3. Explain why Paul Petro did NOT include all the rent received on September 29, 2016, in his profit and loss for the year ended September 30, 2016. State which accounting concept he applied.

SOLUTION

QUESTION 1A

Rent received A/c

2016		\$	2016		\$
Sept 30	Prepaid c/d	1440	Sept. 23	Bal. c/d	23580
Sept 30	Profit and Loss A/c	23580	Sept 29	Bank	2940
		25020			25020
			20015		
			Oct 1	Prepaid b/d	1440

QUESTION 1B

John	Strawn A/c				
2016		\$	2016		\$
Sept 30	Bal. b/d	540	Sept 27	Bad Debts	540

QUESTION 1C

Bad debts A/c

20146		\$	2014		\$
Sept 27	John Strawn	540	Sept 30	Profit & Loss A/c	540

QUESTION 2

John Strawn was unable to pay Paul Petro. However, according to the accounting concept, all losses should be accounted for.

Bad debt is a loss for Paul Petro since he will not receive the amount unpaid.

The accounting concept applied here is: prudence concept.

QUESTION 3

Rent received on September 29 totalling \$1,440 which is income of the next month and not the current month.

Only the current month's income is transferred to the profit and loss account.

The accounting concept applied here is: Accrual concept or matching principle.

Below are TWO multiple-choice questions: Choose the most appropriate response.

1. Which statement is correct?

- a) An asset is always a credit entry.
- b) An expense is always a credit entry.
- c) An expense is always a debit entry.
- d) A liability is always a debit entry.

REASONING

- i. An asset is always a debit entry.
- ii. Liability is always a credit entry.
- iii. Expense is always a debit entry.

Most appropriate response: C

2. Tyler Wilson, a trader, discovered an error in his accounting records. The following entry was made in his general journal to correct the error:

		Dr	Cr
2016		\$	\$
Dec 31	Stationery	80	
	Purchases		80

a) Goods purchased for resale had been credited to the stationery account.

- b) Goods purchased for resale had been debited to the stationery account.
- c) Stationery purchased for office use had been credited to the purchase account.

d) Stationery purchased for office use had been debited to the purchase account.

REASONING

i. Purchases has been credited; it had been incorrectly debited. ii. Stationery is debited which means it has been increased.

Most appropriate response: D

Examination preparation tip:

As you get closer to your examination, to assist with your preparation, I encourage you to:

Try to develop you own technique for revision.

Try not to see the exam as anything other than a normal schoolday on which you are doing an exam.

■ Think that at least after the exam, you will be able to relax and won't have to do much more revision.

This is where we end for this school year/examination period. As you sit your examination, I hope you will reap the success you worked for. Be confident and reproduce what you have learnt as you were completing the syllabus. Best wishes.

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

yl:chemistry

Revision questions

FRANCINE TAYLOR-CAMPBELL Contributor

Use your laboratory notebook to attempt this question.

QUESTION

Describe what is observed (with the aid of equations) in each of the following reactions. (a) Aqueous NaOH is added to aq iron(III) sulphate.

(b) Dilute HCl is added to solid sodium carbonate.

(c) Aqueous barium chloride is added to dilute sulphuric acid.

(d) Aqueous silver nitrate is added to aq sodium chloride. **(8 mks)**

ANSWERS

(a) A rusty-brown precipitate is formed, which is insoluble in excess NaOH. $Fe^{3+}(aq) + 3OH^{-}(aq) \rightarrow Fe(OH)_{3}(s)$

(b) Sodium carbonate would dissolve and a gas would be given off.

 $Na_2CO_3(s) + 2HCI (aq) 2NaCI \longrightarrow (aq) + H_2O(I) + CO_2 (g)$

(c) A white precipitate will be seen, which will remain insoluble. Ba²⁺(aq) + SO₄²⁻(aq) \rightarrow BaSO₄(s)

(d) The silver nitrate would react with the chloride ions to form a white precipitate of silver chloride. Ag⁺(aq) + Cl⁻(aq) AgCl (s)

QUESTION

The effect of heat on compounds of metals may be predicted from the position of the metals in the reactivity series.

(a) How would the action of heat on potassium carbonate differ from the action of heat on copper (II) carbonate? Give the relevant equation(s).

(b) When most nitrates are heated, one or two gases may be given off. From the nitrates of the metals sodium, calcium, magnesium and zinc, select one nitrate that (i) gives off one gas (ii) gives off two gases.Give the equation of the reaction in (ii) above.(c) In the reactivity series, metal X is placed

below zinc but above copper. (i) What happens when the hydroxide of copper is heated?

(ii) What products would you expect to obtain when the hydroxide of X is heated in a dry test tube?

(iii) Metal X forms the X^{2*} ion. Write a balanced equation, using X as the symbol for the metal, for the reaction that you would expect to take place when the hydroxide of X is heated in a dry test tube.

ANSWERS

.

(a) Potasium carbonate is stable and not decomposed by heat, while copper (II) carbonate would be decomposed by heat.

 K_2CO_3 (s) $\rightarrow K_2CO_3$ (s) (stable to heat) $CuCO_3 \rightarrow CuO$ (s) + CO_2 (g) (decomposed by heat) (b) (i) Sodium nitrate gives off only one gas (oxygen) when heated.

(ii) Calcium, magnesium and zinc nitrates produce two gases (oxygen and nitrogen dioxide) when heated.

 $2Mg (NO_3)^2 (s) \rightarrow 2MgO (s) +$ $4NO^2 (g) + O_2 (g)$ (c) When copper hydroxide is

heated, it decomposes to form copper oxide and steam. (ii) If the hydroxide of X is

heated in a dry test tube, one would expect to obtain the oxide of X and steam. (iii) If the ion of X is X²⁺, then the formula of its hydroxide is

 $X(OH)^2$. Therefore, $X(OH)^2$ (s) $XO(s) + H_2O(g)$

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

yl:biology

MONACIA WILLIAMS

I THERE, students! It is that time of year again. I can hardly believe that we have finished another year of lessons. I enjoyed the time that I spent with you and I hope you did, too!

Remember how your exam is set? There are three papers. Paper 03 represents the School Based Assessment, which is now history, and there is nothing you can now do to alter that mark, so we will not spend any time to even think about it. Paper 01 is the multiple-choice paper which consists of 60 multiple-choice items and, remember now, the items cover the entire syllabus. Despite what you may think, Paper 01 does not provide items for a guessing game; neither is it a contest, providing prizes for the candidate who finishes in the shortest possible time. Each question requires serious analysis and thought before you attempt to shade! Be reminded also that poor shading techniques can create problems for you. Avoid using your eraser, and invest in the correct pencil. Your pencil must be HB, not H, and definitely not 2H! The shading from the soft (HB) pencil is what the computer handles best; erasing what you consider an incorrect answer provides the computer with two options and it may not chose the one that you want it to choose, so do not erase. Use the time given wisely, read each question carefully before deciding on an answer. Take careful note of the words that are in capitals and in bold. These are the key words and they are important in helping you to understand the questions.

Paper 02 is the paper that deals with structured questions (Section A) and extended essays (Section B). This is the paper that most students tend to dread. It consists of three structured and three extended essay questions, each worth 15 marks. There is a difference, however; the 15 marks are much harder to earn from Section A than from Section B. Why is this so? This is so because Section A requires precise, well-reasoned answers and few students are very good at giving these! How, then, can you manipulate this, paper to get maximum marks? Do not spend time answering all of the questions in Section A before you attempt Section B. If you do this, you will find that you will spend too much time on Section A and not have enough time left for Section B, where you are likely to gain more marks. What do you do then? Do Question 1 in Section A and then go to Question 4 in Section B, and continue like this until you get to the end. This way, all the questions will be given equal attention.

ANSWERING SECTION A

■ Read the information at the start of the question carefully. Read it until you understand what it is about and what you have been asked to do. Annotate, deduce, distinguish, differentiate, discuss, explain, precaution, suggest are words that are almost always on the question paper. Do you know what these words mean? If you do not, how are you going to answer the questions correctly? Hint: If you have not yet discovered it, there is a glossary of terms at the back of your syllabus. How much detail

Acing your exams



do you need to give? The question will give you clues:

Give short answers to questions which begin: 'State ...', 'List ...', 'Name ...'

■ Give longer answers if you are asked to 'Explain..', 'Describe', 'Why does ...'

■ Section A's questions are to be answered in the spaces or ruled lines that are provided with the question. The number of lines provided is a guide as to how much you are expected to write. DO NOT WRITE OVER THE QUESTION IN YOUR ANSWER! You are wasting time and space. E.g., Explain some long-term effects that deforestation is likely to have on climate and soil fertility.

It is not necessary for you to write: 'The long-term effects of deforestation is likely to cause ...' This will take up almost two lines of the space allotted as well as time that can be used to write the answer, and also serves to repeat the question which is already on the paper. Instead, go directly to the answer: 'Deforestation can lead to an increase in the CO₂ content of the air which will. ...'

ANSWERING SECTION B

■ Again, read each question carefully. Each question is divided into several sections. Look at the marks allotted to each and use this as a guide to the length and depth of your answer. You cannot write the same number of points for a question which is worth six marks as you would do for one to which three marks are assigned.

■ Do not provide answers for questions that are not asked. E.g., you are asked: Why are you doing biology? You do not answer by writing: Biology is a wonderful subject that deals with the study of living organisms and I love animals. You answer: I am doing biology because I want to become a pharmacist and it is one of the requirements.

■ Use the information in the different sections of the questions to help you to focus your thoughts on the information that you need to recall. Believe me, it is quite possible for you to write one full page and get 0 marks.

■ Learn to spell biological terms and words. It is important and it is a habit that you must develop. Many of you aspire to become medical workers; think of what would happen if certain key words relating to the patient's treatment were to be spelt incorrectly!

■ Learn to draw biological structures. Do not practise these drawings in your head; practise them on paper! This is the only way that you will be able to test your knowledge and your skill.

Annotate your drawing. It saves time!

■ Do not rewrite the annotations in the body of your answer; you are wasting time!

Now go and get some past papers and practise. Good luck!

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

yl:information technology

Information processing

NATALEE A. JOHNSON

Contributor

• OOD DAY, students. This is lesson 32 in our series of lessons. In this week's lesson, we will ${f U}$ begin to look at some of the key concepts of the unit called Information Processing.

METHODS OF VERIFICATION AND VALIDATION OF DATA

Before we examine the different methods of verification and validation of data, we need to examine some errors that may occur during the entry of data into a computer system or the sending of data.

TRANSMISSION ERRORS

This is when data received by a computer or system is not the same as what was sent by another computer, which could be as a result of an electrical fault or faulty cabling, as well as the computer used to send the data.



EXAMPLE

yyyyyoooo is transferred as x&*`^\$yyoo

TYPOGRAPHICAL ERRORS

These are errors made typically by humans when we are typing data. This can also be said to be an accidental error (errors that are not made on purpose). For example, typing in a wrong date of birth.

EXAMPLE 2

I forgot my password to myi nstagram account.



TRANSPOSITION ERRORS

These are errors made when numbers or characters are placed in the wrong order. An example of this could be when we are typing a date of birth for someone who was born on the 12th of September 1998 and we type 09/12/98 instead of the 12/09/98.

EXAMPLE 2

I swa Black Panther on Friday. It was epic!



Some errors can also be considered to be deliberate, where errors are made by humans intentionally for personal gain or just to create disruption. For example, someone may falsify a document to gain acceptance in an institution or for a scholarship.

There are two ways of preventing errors made by humans and they are data verification and data validation. Data verification is a process carried out by humans, whereas data validation is an automatic process carried out by software.

DATA VERIFICATION

The errors we examined in the previous lesson would warrant the need for data verification. Data verification is the process of checking for errors that might have been entered in the computer from a source document or when data is copied from one medium or device to another. Two methods of data verification are double entry and proofreading/visual checks.

The double-entry method is the process of entering data more than once using a program that checks each second entry against the first. If the data entered is not the same, it will not get processed and the system will allow for the re-entry of data to ensure the data entered is accurate. An example of this process would be when you are required to enter your password twice

	Enter Password:		
	•••••		
	Repeat Password:		
	•••••		
		ОК	Cancel

when setting up your email to confirm your password.

Proofreading, on the other hand, checks the data entered against the data on the original source document. This method can be time-consuming, as it requires the user to read the information from the source document and check it against what was entered in the system.

Visual checks utilise on-screen prompts. When a set of data is entered, it is redisplayed on the screen. The user is prompted to read it and give a confirmation that the data entered is correct. If the data is incorrect, the data is re-entered.

DATA VALIDATION

Data validation employs several ways of checking for the accuracy and completeness of data. Let us examine the most popular methods that can be used to validate data.

RANGE CHECKS

Range check ensures that the data entered is within a particular range. Examples of such a check would be data pertaining to the number corresponding to the months of a year and not exceeding the number of hours in a day.

REASONABLENESS CHECKS

Reasonableness checks ensure that data is reasonable; that is, the data entered is realistic. For example, a student enrolled in first form with a particular date of birth; his or her age, when calculated by the computer system, should correspond (say age 11). Thus, a child who is 17 years

CONTINUED ON PAGE 20

yl:information technology

CONTINUED FROM PAGE 19

cannot be linked to a date of birth younger.

DATA-TYPE CHECKS

Data type checks, also called character checks, ensure that the right type of data has been entered. They ensure that if you intend to enter numbers, only numbers are allowed to be entered, and if only characters or symbols are intended to be entered, then only that type of data is allowed. Example, if you are storing someone's name, only letters would be entered; values would not be allowed.

INCONSISTENCY CHECKS

Consistency/inconsistency checks compare data you have entered against other data you have entered. If you enter a person's year of birth and age in separate fields, a consistency check will ensure that the two fields correspond with each other. Thus, if the age of an individual is not in line with his/her date of birth, then this would be considered to be inconsistent.

PRESENCE CHECKS

This check ensures that required data is always present. For example, if in a database information is stored on a set of employees and each employee must have an ID number, a presence check will ensure that the ID field is not left blank. On the other hand, there are cases where some fields in a database may be optional. For example, not everybody may have a house number but everybody may have a cell phone, so the field which stores a customer house number may be left blank.

FILE ORGANISATION AND ACCESS

File organisation and access relate to the use of records, fields and files stored in a database. You would have been exposed to all three terms when you did the productivity tool: database in class.

A file has three important characteristics and they are as follows: Data Source

A file see although a	Jaca Source				
A file can either be	TITLE .	LAST NAME .	FIRST NAME +		
permanent or temporary.	Ms.	Lewis	Gwenyette		
The manner in	Mr.	Lewis	Mark		
	Mr.	Roper	Mark		
which the records of the	Ms.	Dawson	Pamela		
file are organised on a	Ms.	Weise	Sasha		
secondary storage device	Ms.	Solomon	Keisha		
,	Mr.	Ferguson	James		
(file organisation).					

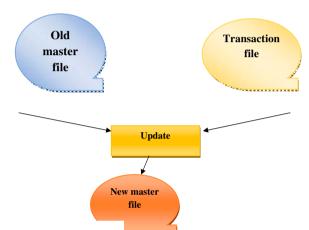
■ The manner in which records are accessed.

There are two main types of files that businesses and organisations utilise: they are a master file and transaction file.

A master file is a permanent file which is kept up to date and stores the main information, summary data and key fields in the data. The master file contains two types of data: data that is permanent, such as an employee's personal data, and data that is less permanent, which is updated on a regular basis, such as the hours worked by an employee.

A transaction file is a temporary file which is used to update the master file after a certain time, whether weekly or daily. A transaction file adds a new record, updates, and deletes records of a master file. See a diagram illustrating this process below (figure 1).

There is also another file, known as a transaction log, which keeps a record of changes to the transaction file. This will keep a record of the history of what transactions have taken place and not just the recent one.



FILE ORGANISATION AND ACCESS METHODS

SEQUENTIAL FILE ORDERING

This is where records are stored in a logical or sorted order. Records can be arranged according to name, date, size or any other field in ascending order.

40 10 20 30 50

SERIAL FILE ORDERING

This is similar to sequential file ordering, except the records are not stored in any particular order (unordered). They are simply stored one after the other as they are added, similar to new items on a shopping list, where as you go along you add what you need. This type of ordering is often used to capture transactions as they occur during the day. 60 50 20 15 44

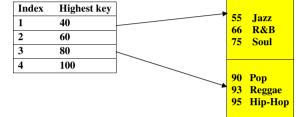
Sequential access means that records are accessed one by one in the order they are stored until the right one is located. Serial access is similar, as you can access the records in the same manner in which they were stored.

RANDOM FILE/DIRECT ORDERING

Files are stored in any order using a key. The file is organised like a one-dimensional array, where each array element has an index/subscript to mark its location. Random access or direct access allows you to access the record you want without having to go through any others, unlike sequential access. The computer locates the data item using the indices.

INDEX SEQUENTIAL FILE ORDERING AND ACCESS

Index sequential file ordering uses an indexed file to store records similar to an index in a textbook. Records are stored in this file in sequential order and a set of indices is used to refer to each item stored in the file. Each record can be accessed by its index number. Thus, this file ordering is a combination of sequential and direct file ordering and is utilised when records need to be sorted sequentially but individual records must be accessed quickly. See diagram below.



By using both methods (sequential and direct), the following can be done: you can go through each record sequentially (one after each other) and you can access a specific file directly (there is no need to go through any previous data (random)).

This lesson brings us to the last in our series of IT lessons for CSEC. On this note, I would like to remind you to practise as many past-paper questions as possible, which will allow you to have an idea of the manner in which you will be tested, how the questions will be structured, and key areas you will likely be tested on. In addition, follow the pointers given by your teacher and ensure you take adequate rest prior to your exams. I would also like to share this message with you from messages.365greetings.com



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