MINISTRY OF EDUCATION

NATIONAL CENTRE FOR EDUCATIONAL RESOURCE DEVELOPMENT

NATIONAL SCHEME FOR SECONDARY SCHOOLS

GRADE 11

INFORMATION TECHNOLOGY







NATIONAL SCHEME FOR SECONDARY SCHOOLS

Curriculum Area: Information Technology **GRADE 11**

ACKNOWLEDGEMENTS

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Curriculum Area: Information Technology **GRADE 11**

					WEEK 1
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Steps in Problem-Solving	Recognize the steps in problem-solving	Define the Problem Solving using computers Problem Solving involves identifying, analysing and resolving problems using logic, reasoning and analytical skills. • List the steps in problem-solving **Steps in problem-solving:** (a) define the problem (b) propose and evaluate solutions (c) determine the most efficient solution (d) develop the algorithm (e) test and validate the solution • Discuss what each step entails	Use real-life scenarios to explain this concept for example sharing the Recipe for baking a cake or giving directions to find a known location. Allow students to share their solutions while allowing their peers to constructively critique the solution. Discussing the steps in problem-solving Demonstrating how to solve simple problems by applying all of the steps listed	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Writing multiple solutions to simple problems Oral questioning Group presentation
Additional resources:	**Notes on Problem-solving:** https://11infotech.weebly.com/lesson-one.html				

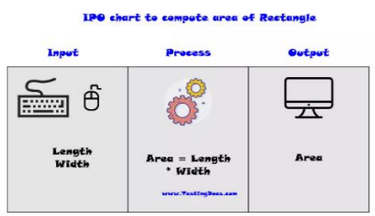
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Curriculum Area: Information Technology **GRADE 11**

					WEEK 2
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Top–Down Approach (Divide and Conquer)	Develop the skill to use the top-down approach to decompose large everyday problems into smaller tasks	• Basic treatment of the structured approach for solving complex problems: • Subproblems are solved independently, and finally, all solutions are collected to arrive at the final answers. • The divide and conquer strategy is simple to solve. • The problems that are part of a Divide and Conquer strategy are independent of each other eg.: -Collect all data first -Then perform calculations using the data -Finally outputting results obtained	Dividing complex everyday problems into smaller manageable tasks Writing the individual tasks' solutions as a whole to form the overall solution	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Oral questioning Group presentation

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					WEEK 3
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-solving Define a problem	Become cognizant of how to define a problem by decomposing it into its significant components	• What is an IPO chart? An IPO (Input, Processing and Output) chart is a table-like structure that aids in identifying the Input, Processing Steps and Output required for a solution to a given problem. • Example of an IPO chart: 	Explain the use and importance of IPO charts Constructing IPO charts to identify the significant components needed to solve a problem Allow students to construct IPO charts in small and then share solutions with classmates.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Presentation of small group work. Test on Weeks 1-3 concepts
Additional resources:	YouTube video: https://www.youtube.com/watch?v=AVbDOk9nYpk				

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					WEEK 4
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**

Problem-Solving
 	
Variables and Constants
	Appreciate the difference between variables and constants	• Define variables
		A variable is an identifier whose value can change during the execution of a program.
		• Define constants
		A constant is an identifier whose value does not change during the execution of a program.
		• List, discuss and give examples of the different data types used in programming:
		  ○ integers
		  ○ floating point (real)
		  ○ characters
		  ○ boolean
		  ○ string
		• Rules for naming variables and constants
			Differentiating between constants and variables
			
			Listing examples of variables and constants
			
			Preparing a short slideshow to discuss what each data type is used to represent
			
			Naming variables to be used in algorithms and programs and assigning appropriate data types.
				CSEC Information Technology Study Guide
				
				Oxford Information Technology 2nd Edition
				
				Microsoft PowerPoint
					Worksheet completion
					
					Written Quiz

Additional resources:	YouTube Video: https://www.youtube.com/watch?v=stz8iRl7_KI&list=PLe7iVPJ4aq9v1pVPWrN2kZoe_cL8VT2Lg&index=3				

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					WEEK 5
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Algorithms	Understand the concept of algorithms	• Definition of algorithms An algorithm is a finite number of logically ordered precise steps or instructions that result in the solution to a problem. • Characteristics of an algorithm: ➢ a finite number of steps ➢ precise ➢ unambiguous ➢ the flow of control from one process to another ➢ terminates • Types of Algorithms being used are: ➢ Pseudocode ➢ Flowchart	Researching algorithms Preparing a poster to enlighten others on the characteristics of a good algorithm.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Poster Presentation Memorization competition

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					WEEK 6
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Pseudocode	Become capable of representing algorithms in the form of pseudocode	• What is pseudocode? Pseudo means false; therefore, pseudocode can be interpreted as false code since it resembles program source code but is not program code • Pseudocode – Use of read, input, store, write, print, output, display,	Discuss what is pseudocode Writing of algorithms using pseudocode language for simple problems.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Test on Weeks 4-6 concepts Worksheet completion
SBA status:	The algorithm component should be discussed and started **(NB: The algorithm to be submitted can be pseudocode or flowchart depending on the instructions given in the SBA handout for the algorithm component)**				

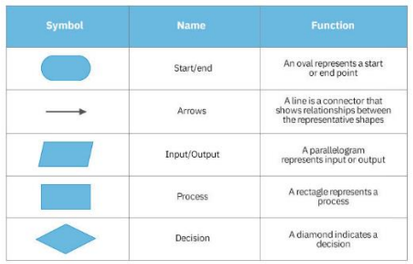
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					WEEK 7
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Pseudocode	Become capable of representing algorithms in the form of pseudocode	• conditional branching (if-then, if-then-else, nested conditions); loops (for, while, repeat). • Use of relational operators: <, >, =, <=, >=, < >. • Logical operators: AND, OR, NOT; use of truth tables. • Arithmetic operators: +, –, *, /, MOD, DIV.	Discussing what is pseudocode Writing pseudocode algorithms using conditional branching and loops.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Test on Weeks 4-6 concepts Worksheet completion
SBA status:	The algorithm component should be discussed and started **(NB: The algorithm to be submitted can be pseudocode or flowchart depending on the instructions given in the SBA handout for the algorithm component)**				

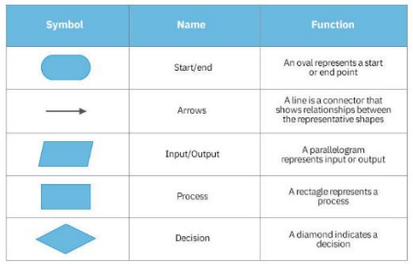
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					WEEK 8
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Flowchart	Become proficient in representing algorithms in the form of flowchart	• What is a flowchart? A flowchart is a diagrammatic representation of an algorithm • Flowchart symbols and their use:  	Identifying flowchart symbols and their uses Drawing flowcharts to show the solution to simple problems	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition MS.Word, MS. PowerPoint, MS. Publisher, MS.Visio, or other suitable software or web app for flowchart creation	Flowchart creation worksheet Oral questioning
SBA status:	The algorithm should be completed and submitted for checking. **(Not final submission)**				
Additional resources:	Free online flowchart creator: https://app.diagrams.net/				

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					WEEK 9
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Flowchart	Become proficient in representing algorithms in the form of flowchart	• Flowchart symbols and their use:  	Drawing flowcharts to show the solution to complex problems which involve loops.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition MS.Word, MS. PowerPoint, MS. Publisher, MS.Visio, or other suitable software or web app for flowchart creation	Flowchart creation worksheet Oral questioning
SBA status:	The algorithm should be completed and submitted for checking. **(Not final submission)**				
Additional resources:	Free online flowchart creator: https://app.diagrams.net/				

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					WEEK 10
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Problem-Solving Testing Algorithms	Display the skill of testing algorithms for correctness.	• Desk checks/dry run: construction and use of trace tables to verify results. • What is a trace table? A trace table is a technique used to test algorithms to make sure that no logical errors occur while the calculations are being processed. Test Data Sets – use of different types of data, for example: normal data - typical, sensible data that the program should accept and be able to process. boundary data - valid data that falls at the boundary of any possible ranges, sometimes known as extreme data. erroneous data - data that the program cannot process and should not accept.	Constructing Trace tables to track the operation of an algorithm to ensure it produces the expected results	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Trace table creation worksheet Test on Weeks 7- 8 concepts

		Trace tables consist of variable names (identifiers) as column headings and values in the cells, one row for each pass.			
Additional resources:	YouTube Video: https://www.youtube.com/watch?v=VcZaewRr0q8&list=PLe7iVPJ4aq9v1pVPWrN2kZoe_cL8VT2Lg&index=4				
SBA Status:	The algorithm should be completed and submitted for **final check and marking.** The trace table aspect should be discussed and started by the end of the week.				

Other Useful resources:

- Guyana Learning Channel YouTube | Information Technology- Grade 11 Algorithm:

https://www.youtube.com/watch?v=_fBMQVrEFoU&list=PLe7iVPJ4aq9v1pVPWrN2kZoe_cL8VT2Lg

- Problem-Solving--Creating IPO Charts

https://www.youtube.com/watch?v=AVbDOk9nYpk

- CSEC Problem solving:

https://11infotech.weebly.com/lesson-one.html

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					WEEK 11
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation Programming Terminology	Become knowledgeable of programming terminology	• Definition of key programming terms such as: o Program o Programmer o Programming o Programming language o Source code o Object code Types of Translators o Compiler o Interpreter o Assemblers	Preparing a Programming Terminology scrapbook Discussing programming terms Differentiating between source code and object code	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition Scrapbook	Group Presentation Oral Questioning
SBA Status:	Students' progress on the Trace Table completion should be checked.				

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					WEEK 12
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation Programming languages	Develop an awareness of the difference between low-level and high-level programming languages	• List of the levels of Programming Languages: ○ Low-level language (Machine or Assembly). ○ High Level (For example, Visual Basic, Pascal, C). • List of the Generations of Programming Languages: ○ 1st Generation (1GL) ○ 2nd Generation (2GL) ○ 3rd Generation (3GL) ○ 4th Generation (4GL) ○ 5th Generation (5GL) • Explanation of each generation of Programming language with examples.	Preparing PowerPoint Presentations for Peer Teaching Discussing the level and generations of programming languages	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition PowerPoint Presentations	Oral Questioning Group Presentation
SBA Status	Submission of Trace table for checking **(Not final Submission)**				

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					WEEK 13
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation Steps in implementing a program	Appreciate the sequence of steps in implementing a program	• Steps in implementing a program: ○ create source code (Translate the algorithm into a specific programming language) ○ link (on some systems this step is transparent to users) ○ execute/run a program on a computer (involves launching it, allowing it to perform its designated tasks, and terminating it when its execution is complete) ○ maintain the program (this involves ensuring its continued functionality, stability, and usability over time)	Researching each step in implementing a program Discussing the steps in program implementation	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Test on Week 9-11 concepts Oral questioning
SBA Status:	Submission of Trace Table is to be made for **final check and marking.**				

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					WEEK 14
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation Declaring variables and constants	Become capable of declaring variables and constants using elementary data types;	These data types provide a way to represent and manipulate different kinds of data within a program. • List of data types in programming: o Integer: Represents whole numbers without any fractional or decimal parts. Examples of integer values are -3, 0, 42, or 100. o Real/Double/Float: Represents numbers with fractional or decimal parts. o Character: Represents a single character, such as a letter, digit, or symbol. Examples of character values include 'A', '7', or '#' o String: Represents a sequence of characters. Strings are used to store text or a collection of characters. o Boolean/Logical: Represents a binary value indicating either true or false. Booleans are used for logical comparisons and conditional expressions. They are commonly used in decision-making and control structures.	Data type matching Discussing Data types Code analysis	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Worksheet completion Oral questioning
NB:	Pick a programming language to work with. Some common ones used are: Python, Pascal, Visual Basic				

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					WEEK 15
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation Testing programs	Become skilled in performing checks and tests on programs to verify correctness	• Types of Errors: o A syntax error occurs when the code violates the rules and structure of the programming language. o A logic error refers to a flaw in the logical flow or reasoning of the code. o A runtime error occurs during the execution of the program when an unforeseen condition or situation arises. • Test data refers to the specific set of input values or scenarios that are used to test a program. • Debugging is the process of identifying, analyzing, and resolving errors or bugs in a computer program.	Discussion Demonstration Practical Tasks	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition Computers	Practical Assessment Oral questioning
SBA Status	Discuss the Programming component of the SBA with students. Students should start the programming task by the end of the week.				

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					WEEK 16
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation From algorithm to source code	Display efficiency in translating algorithmic statements into high-level language syntax	Programming statements: • Assignment statements • input/output operations using standard input/output (reading data entered via the keyboard, displaying data on monitor). • The syntax for arithmetic, logic and relational operators. • The syntax for conditional branching (for example, if-then, if-then-else, nested if-then-else or case).	Practical Demonstration Practical Tasks –allow students to write programs while sharing their experiences with each other to better their skills.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition Computers	Practical Assessment Oral questioning

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					WEEK 17
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation From algorithm to source code	Display efficiency in translating algorithmic statements into high-level language syntax	The syntax for Iteration (Loops): for, while, repeat.	Practical Demonstrations Practical Tasks –allow students to write programs while sharing their experiences with each other to better their skills. Emphasize peer teaching	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition Computers	Practical Assessment Oral questioning

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					WEEK 18
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Program Implementation Documentation	Develop the habit of effectively documenting programs.	• What is the documentation? Programming documentation refers to written materials or resources that provide information and guidance about a program or software. • Importance of documentation. • Types of documentation 1. Features of internal documentation (use of mnemonic, variable names, use of comments, indentation, effective use of white space). 2. Features of external documentation (user manual).	Using appropriate variable names Using comments Using indentation Preparing a user manual	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition Compiler (for whichever programming language was chosen) Notepad or MS Word (for external documentation)	Practical Assessment Test on Weeks 12-17 concepts
SBA Status	The program should be checked for progress on completion Submission of Program for checking. This submission includes: • Working program (i.e source code (which should have internal documentation)) • Screenshots of a program working with test data for the first 10 records from the database or spreadsheet component: where applicable) External Documentation				

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					WEEK 19
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Information Processing Types of Documents	Become au-fait with the types of documents used in the information processing tasks	• Turnaround Document: A turnaround document is designed to collect and process data and then return it to the originator or another party for further action. • Human-Readable and Machine-Readable Forms: Human-readable forms are designed for easy comprehension and understanding by humans. On the other hand, machine-readable forms are designed for automated data processing by machines or computers.	Document Presentation and Debate Document Sorting Game	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Written assessment Group Presentation

		• Hard Copy: A hard copy refers to a physical or tangible document that exists in a printed or physical form. • Soft Copy: A soft copy, also known as an electronic copy or digital document, exists in a digital or electronic form that requires electronic devices to access and read.			
Tips:	• Document Presentation and Debate: Assign small groups of students with different document types to research and present to the class. Each group can create a multimedia presentation highlighting the features, purposes, advantages, and disadvantages of their assigned document type. After the presentations, facilitate a debate where students argue for the superiority of their assigned document type based on specific criteria, such as efficiency, usability, or environmental impact. • Document Sorting Game: Prepare a set of documents representing different types, such as turnaround documents, human-readable forms, machine-readable forms, hard copies, and soft copies. Mix up the documents and ask students to sort them into categories based on their types. Encourage students to discuss and explain their reasoning for categorizing each document.				
SBA Status:	Submission of Programming component for **final check and marking.**				

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					WEEK 20
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Information Processing Reliability of information	Display an awareness of evaluating the reliability of information obtained.	• Evaluating the reliability of information is crucial in today's digital age where vast amounts of information are readily available. Knowing how to critically assess the reliability of information helps you make informed decisions, avoid misinformation, and develop strong research skills. • Evaluation of information retrieved electronically for authenticity, currency, relevance, and bias.	Hosting a Media Literacy Workshop Source Analysing	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Written assessment Oral questioning
Tips:	• Media Literacy Workshop: Conduct a media literacy workshop where students learn about different types of media, such as news articles, social media				

	posts, images, and videos. Guide them through exercises that help identify misinformation or unreliable content, such as identifying clickbait headlines, analyzing image manipulation, or detecting false information in social media posts. Provide them with strategies to verify information and critically evaluate sources. • Source Analysis: Provide students with different sources of information, such as websites, articles, social media posts, or videos. Ask them to analyze the sources by considering factors such as author credentials, publication or creation date, the reputation of the source, and potential biases. Students can create a matrix or checklist to evaluate and compare the reliability of the sources.

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					WEEK 21
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Information Processing Data Processing Methods	Develop an awareness of the various methods utilized to process data.	Data processing methods: Batch processing Online Processing Real-Time processing Batch processing is a method of processing data in which a group or batch of transactions or data is collected and processed together as a single unit. Online processing, also known as online transaction processing (OLTP), involves the immediate processing of transactions as they occur. Real-Time Processing: Real-time processing refers to the immediate processing and updating of data as it is generated or received, without any delay.	Discussing the various methods of data processing Preparing a table to distinguish between the three processing modes	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Oral questioning Group Presentation

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					WEEK 22
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Information Processing File organization	Become competent in selecting appropriate file organization for particular applications.	• File access methods: ○ In sequential access, data is read from or written to a file sequentially, one record after another, from the beginning to the end of the file. ○ Serial access is a variation of sequential access where data is accessed using a serial or tape-like medium. ○ Direct access, also known as random access, allows for accessing data in any order without the need to read through preceding records. • Application areas: archiving, payroll file, real-time systems.	Case Study Analysing Preparing Poster to enlighten colleagues on file access methods	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Test on Information Processing Oral questioning

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					WEEK 23
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Implications of Misuse and Cybersecurity Computer Security, Cybersecurity and Computer Misuse	Be vigilant of the concepts of computer security, cybersecurity and computer misuse	Computer security refers to the practice of safeguarding computer systems, networks, and data from unauthorized access, damage, disruption, or theft. Cybersecurity is a subset of computer security that focuses specifically on protecting computer systems and networks from cyber threats. Computer misuse refers to the unauthorized or inappropriate use of computer systems, networks, or data, often for malicious purposes or with the intent to cause harm.	Discussing and analyzing real-life examples of security breaches, cyberattacks, and computer misuse incidents. Researching and presenting cybersecurity best practices, including topics like password security, phishing awareness, and secure browsing habits.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Group Presentation Oral Questioning

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					WEEK 24
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Implications of Misuse and Cybersecurity Computer Security	Be mindful of computer misuse and potential threats.	Computer Misuse situations: • Unauthorized access • Malware distribution • Phishing • Denial-of-Service (DoS) attacks • Data breaches • Identity theft • Social engineering • Insider threats • Software piracy • Cyberbullying • Hacking • Unauthorized modification or destruction	Summarizing the key learnings and reinforcing the importance of responsible and ethical computer use. Analysing the implications, potential consequences, and preventive measures for each scenario.	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Group Presentation Oral Questioning

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					WEEK 25
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Implications of Misuse and Cybersecurity Data security	Be mindful of computer misuse and potential threats.	• List of potential threats to data and information with countermeasures: o Malware (e.g., viruses, ransomware): Install and regularly update antivirus software, regularly back up data, and practice safe browsing habits. o Phishing attacks: Educate users about recognizing and avoiding phishing emails or websites o Unauthorized access: Implement strong access controls and authentication mechanisms, regularly review and revoke access rights, and use strong passwords or multi-factor authentication.	Designing a Security Awareness Poster	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Poster Design Presentation Oral Questioning

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					WEEK 26
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Implications of Misuse and Cybersecurity Personal Security Practices	Develop the habit of using safe security practices	• Some practices include: ○ verifying the authenticity of emails from companies or individuals ○ assessing website URLs for authenticity ○ limiting access to open Wi-Fi networks ○ securing mobile devices ○ protection in an online environment (for example, social media).	Discussing safe security practices Prepare PowerPoint Presentation	CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Group Presentation Test on Implications of Misuse and Cybersecurity
NB:	**To better aid your students in performing well at the CSEC Examinations, ensure to work and discuss the answers to past papers (At least the last 5 years of papers)**				

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					WEEK 27
TOPIC/ SUB-TOPIC	**GENERAL OBJECTIVE**	**CONTENT**	**ACTIVITY**	**RESOURCE**	**EVALUATION STRATEGY**
Implications of Misuse and Cybersecurity **Impact on Job Skills and Careers**	1. To describe the roles of various personnel in computer-related professions; and, 2. Assess the impact of information and communications technology on select fields.	○ Job loss vs productivity gains in skilled and unskilled job categories. - Network Engineer, Computer Programmer, Computer Support Specialist, Computer Systems Analyst, Administrator (Network, Systems and Database), Software Developer, Web Developer, and Social Media Specialist. ○ Economic implications of ICT on Education, Medicine, Business, Law Enforcement and Recreation. For example: (a) Impact on Education in terms of access to information, reach (distance teaching), collaborative teaching and learning, plagiarism; online tutoring. ○ Impact on Medicine in terms of access to information (for both medical personnel and patients), telemedicine, eHealth (online access to health services), implications for the quality of healthcare, increase in self-diagnosis, easy access to medical expertise in distant locations (for example, teleradiology).	Discussing the roles various personnel play in their professional practices Prepare PowerPoint Presentation	Heinemann Information Technology for CSEC CSEC Information Technology Study Guide Oxford Information Technology 2nd Edition	Group Presentation Research the advantages of ICT in every aspect of life. Quiz
NB:	**To aid improved performance at the CSEC Examinations by answering past papers (At least the last 5 years of papers)**				