

Verdgem Quiz

Teacher's Guide



PHYSICS FALLS



MATH MOUNTAINS



About VerdGem

VerdGem is an Education Technology venture on a mission to raise education standards across the Caribbean. Our focus is on delivering creative, regionally relevant, and multimodal learning tools designed specifically for Caribbean students.

Our Mission is to develop high-quality learning tools accessible to every Caribbean student. We believe education should be exciting, inclusive, and rooted in the realities of our region. VerdGem aims to complement traditional education by offering tools that adapt to each student's pace and learning style.

Our two flagship products are an AI-powered quiz platform and an on-demand video platform, both tailored to provide students with different modes of learning.



Our AI-Powered Quiz Platform

The VerdGem Quiz Platform is a modern, web-based application designed to help students prepare for CSEC exams through interactive, personalised, and engaging practice. Built with both learners and educators in mind, our platform has a number of benefits:

For Students: Builds exam confidence, encourages consistent practice, and rewards progress through interactive elements.

For Teachers: Offers insights into student performance, allows for early intervention, and supports lesson planning with data. Also gives teachers a chance to test students' knowledge in an engaging and interactive way.

For Schools: Enables evidence-based decision-making and supplements traditional teaching methods with minimal setup or cost.



Adding Topics and Subtopics

You can access the quiz application at:

<https://quiz.verdgem.com/>

Before you do anything, you'll need to sign in.

The first order of business is adding topics for your assigned subject. These topics will correlate to the different sections of the CSEC syllabus.

You can add topics from the Subject page or Topics page.

Subjects / Information Technology

Information Technology

Edit

Delete

Description

The CSEC Information Technology (IT) subject equips students with essential digital skills needed for today's technology-driven world. It covers a wide range of topics, including computer hardware and software, programming, networking, cybersecurity, database management, and problem-solving using technology. Students develop both practical and theoretical knowledge, preparing them for careers in IT-related fields or further studies in computing. This subject fosters critical thinking, logical reasoning, and hands-on skills, ensuring that learners can confidently navigate and adapt to the ever-evolving digital landscape. Whether aspiring to be a software developer, network engineer, or IT professional, CSEC IT provides a strong foundation for future success.

Topics

Topic Name

Computer Fundamentals and Information Processing

Computer Networks and Web Technologies

Social and Economic Impact of Information and Communications Technology (ICT)

Word-processing and Web Page Design

Spreadsheets

Database Management

Problem Solving and Program Design

Program Implementation

Questions Actions

261	View	Add Question	Edit
187	View	Add Question	Edit
212	View	Add Question	Edit
130	View	Add Question	Edit
224	View	Add Question	Edit
188	View	Add Question	Edit
145	View	Add Question	Edit
92	View	Add Question	Edit

Add New Topic

Adding Topics and Subtopics

The next step is to divide your topics into subtopics.

Subtopics allow students to access questions on a specific subtopic within the different sections of the syllabus. For example Wireless Network Technologies can be a subtopic of the Information Technology section Computer Networks and Web Technologies.

You can add subtopics from the page of a selected Topic.



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[Subjects](#) / [Information Technology](#) / [Computer Fundamentals and Information Processing](#)

Computer Fundamentals and Information Processing

Description

On completion of this Section, students should: develop an understanding of the fundamental hardware and software components and the interrelationship among them; develop expertise in evaluating computer systems; and, develop an understanding of basic information processing principles.

Subtopics

Subtopic Name	Questions	Actions
Types of Computers	10	<button>View</button> <button>Edit</button>
Primary Storage	0	<button>View</button> <button>Edit</button>
Secondary Storage	0	<button>View</button> <button>Edit</button>
Units of Storage	0	<button>View</button> <button>Edit</button>
IPOS Cycle	0	<button>View</button> <button>Edit</button>
Output Devices	0	<button>View</button> <button>Edit</button>
Input Devices	0	<button>View</button> <button>Edit</button>
Computer Software	0	<button>View</button> <button>Edit</button>
Data Validation & Verification	0	<button>View</button> <button>Edit</button>

[Add Subtopic](#)

Adding Questions

Questions can be added from Subject, Topic, and Subtopic pages. Questions always correspond to the topic they are created under.

When adding questions there are a number of important fields to be filled:

- **Question Type:** Whether the question is multiple choice or long answer format
- **Subtopic:** The subtopic that the question should be grouped under. Questions can belong to multiple subtopics
- **Question:** This is the question that will be displayed to students to answer
- **Question Image:** An optional image that can be used as illustrations, diagrams, etc for questions
- **Difficulty Level:** Assigns a difficulty to the question as well as the number of marks for the question. Easy: 1 mark, Medium: 3 marks, Hard: 5 marks. Multiple choice questions are always set to easy.



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Information Technology

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Adding Questions

Multiple Choice Fields

- **Answer Options:** The answer options available to students for multiple choice questions.

Long Answer Fields

- **Model Answer:** An example of an answer students are expected to give for the specified question. This field is very important as it is used by the system to grade student answers.
- **Key Concepts:** Key concepts that the question covers
- **Marking Criteria:** This tells the system how to grade the student's answer. The total of all criteria must always equal the number of marks assigned to the question.

Answer Options

Option Text

Local Area Network

☒ Correct Answer

Option Text

Long Area Network

☐ Correct Answer

Option Text

Local Astro Network

☐ Correct Answer

Option Text

Local Area Nest

☐ Correct Answer

Question Writing Guide

This guide helps you write effective quiz questions at different difficulty levels: Easy, Medium, and Hard. Each type serves a purpose — from reinforcing fundamentals to challenging students to think critically.

Easy Questions (1 mark)

Purpose: Test basic recall and recognition

Ideal for: Definitions, acronyms, simple facts

Ideal Questions:

Definitions of key terms

Meaning of acronyms

One-word or short-phrase answers

Basic identification (e.g., types, categories)



Examples (CSEC IT):

What does the acronym "CPU" stand for?

→ Central Processing Unit

Define the term “software”.

→ Programs and operating information used by a computer.

Name one input device.

→ Mouse

Question Writing Guide

🟡 Medium Questions (3 marks)

Purpose: Test understanding and ability to explain or differentiate

Ideal for: Short explanations, comparisons, applying basic concepts

✅ Ideal Questions:

Brief explanations (2–3 sentences)

Differences between two terms

Purpose or function of a component

Everyday application of a concept

💡 Examples (CSEC IT):

Explain the difference between RAM and ROM.

→ RAM is temporary memory used while the computer is running, while ROM is permanent memory used to store firmware.

State two uses of a spreadsheet application in a business.

→ To manage payroll and to track inventory.

Why is data validation important in a database?

→ It ensures that only correct and reasonable data is entered.

Question Writing Guide

● Hard Questions (5 marks)

Purpose: Test deep understanding, analysis, and reasoning

Ideal for: Essay-style questions, compare & contrast, listing, true/false, matching

✓ Ideal Questions:

In-depth explanations (4+ sentences)

Compare and contrast two related topics

Evaluate pros/cons

Mini case scenarios

True/false with justification

Matching concepts with definitions

💡 Examples (CSEC IT):

Compare and contrast a LAN and a WAN in terms of coverage area, cost, and example use.

→ A LAN (Local Area Network) covers a small area such as an office, is relatively inexpensive, and is used within schools. A WAN (Wide Area Network) covers large areas like cities or countries, is more costly, and is used by banks or international companies.

List three characteristics of a good password and explain why each is important.

→ Length — harder to guess; Complexity — includes symbols, numbers; Uniqueness — not reused across platforms.

True or False: The operating system is responsible for managing hardware resources. Explain your answer.

→ True. The operating system acts as a bridge between the user and hardware, handling memory, CPU, and I/O operations.

Match the following terms with their definitions:

Term	Definition
Firewall	___ B ___
Antivirus	___ A ___
Cloud Storage	___ C ___
Secondary Storage	___ D ___
Primary Storage	___ E ___

- A. Software that detects and removes malware
- B. Blocks unauthorized access to or from a private network
- C. Online storage service accessed via the Internet
- D. Computer storage that includes CD-ROMs and Hard drives
- E. Computer memory that includes RAM and ROM

Question Writing Guide

Aim to create at least 100 long answer questions per topic, evenly distributed across all difficulties and subtopics created.

Also aim to create 100 multiple choice questions per topic, evenly distributed across all subtopics created.

This helps ensure full coverage of the syllabus and a balanced set of practice opportunities for students.

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How Quiz Grading Works

When students submit an answer our AI system checks their answer against the question marking criteria. The AI system also looks at the model answer to see what an appropriate answer should look like. The model answer also lets the system know how in depth the student should answer the question.

When giving feedback the AI system lets students know what they did well, as well as areas they could improve in. A final score is also given based on their performance against the marking criteria.

