

est

EST High School Assessment Suite

Description Document

2026 Specifications

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Executive Summary

The EST High School assessment suite provides a comprehensive framework for measuring students' academic readiness and subject-specific proficiency at the end of secondary education. It consists of two complementary components: **EST I HS**, which assesses core cross-curricular skills in literacy and mathematics, and **EST II HS**, which evaluates in-depth knowledge and higher-order thinking in eight academic disciplines. The 2026 specifications introduce streamlined test designs for EST I HS and updated specifications for five EST II HS subjects: Math Level 1, Math Level 2, Biology, Chemistry, and Physics. The three subjects introduced in 2024 — Economics, English Literature, and World History will continue to follow their original specifications.

This document outlines the structure, content domains, cognitive levels, and design principles of all EST I HS and EST II HS subject tests, providing a clear reference for schools, educators, and universities across the region.

Introduction

Starting in 2026, Academic Assessment Ltd. will expand its assessment services to include not only the High School level but also new Middle School and Elementary School assessments. These additions aim to provide a continuous framework for measuring student development across all stages of schooling. While the Middle and Elementary levels assessments are in development, this introduction focuses exclusively on the **High School EST (EST HS)** and its new 2026 specifications.

The **High School Electronic Scholastic Test (EST HS)** is a comprehensive assessment designed for students enrolled in international programs such as the American Diploma. Its purpose is to measure students' readiness for higher education by evaluating both their foundational academic skills and their preparedness for specific university majors. The EST assesses a wide range of abilities, including literacy, numeracy, analytical reasoning, critical thinking, and problem-solving, which are essential for success in university and beyond.

Owned by Academic Assessment Ltd. in London and validated by a distinguished academic board in the United States, the EST is scored electronically to ensure fairness, accuracy, and impartiality. This rigorous process strengthens its credibility as a reliable tool for academic readiness and university admissions. In addition, UK ENIC (ECCTIS) has formally recognized the EST as comparable to the SAT in the United States, reinforcing its international standing.

The **EST suite** at the High School level comprises two complementary components:

- **EST I HS:** This component measures literacy and numeracy skills through successive tests taken on the same day: Literacy test, Math test, and Essay Writing (optional).
EST I includes two mandatory sections — Literacy and Math — and primarily targets communication, comprehension, critical thinking, problem solving, and logical reasoning skills, all of which are basic requirements for a university student. The optional Essay Writing section is recommended but not obligatory for students intending to pursue studies in linguistics, public relations, or communications.
- **EST II HS:** This component consists of subject-based tests in Chemistry, Biology, Math, Physics, Economics, Literature, and World History. These tests are designed to measure subject-specific knowledge and higher-order thinking, helping align students' strengths with academic majors in areas such as engineering, sciences, healthcare, business, and the humanities. The EST II HS subject-based tests are taken separately.

The EST is currently available in Saudi Arabia, the United Arab Emirates, Jordan, and Egypt, and is officially recognized by the Ministries of Education in Jordan and Egypt, as well as the Supreme Council of Universities in Egypt. By offering a fair, transparent, and academically robust assessment, the EST helps both students and universities in making informed decisions about higher education pathways.

The next section of this document elaborates on the design of the EST HS assessments.

Assessment Design - EST I HS

The EST I High School (EST I HS) includes two mandatory sections — the EST I HS Literacy test and the EST I HS Math test — and one optional section, the EST I HS Essay Writing. The following outlines the new design of EST I HS (2026 specifications).

EST I HS Literacy Test

The EST I HS Literacy Test is designed to assess students' reading comprehension skills and their ability to use language effectively across a variety of contexts. It evaluates not only foundational language skills but also students' capacity to analyze, interpret, and synthesize ideas through engagement with high-quality literary, informational, explanatory, and argumentative texts. By combining reading comprehension with language usage, the test provides a comprehensive measure of the critical thinking, analytical reasoning, and communication skills essential for academic success at the university level.

The test is divided into **three modules**, each targeting specific aspects of literacy:

- **Module 1: Writing** – Students engage with 2–3 passages (300–800 words each) focused on writing and language use in various contexts. Students demonstrate editorial judgement by improving clarity, concision, style, structure, organization, and grammatical accuracy.
- **Module 2: Reading** – Students read 2 passages (400–800 words each) and answer questions that assess their ability to identify central ideas and key details, interpret words and phrases, analyze relationships and text structure, evaluate evidence and reasoning, determine purpose and point of view, and synthesize information across sources.
- **Module 3: Reading and Writing** – Students work with several short passages (25–100 words each) that integrate both language usage and reading comprehension skills. This section assesses their flexibility in handling different text types and task requirements.

Table 1 describes the test structure of the EST I HS Literacy Test based on the 2026 specifications.

Table 1: EST I HS Literacy Test Structure

Number of tests/parts	1 test – 3 modules Module 1: Writing Module 2: Reading Module 3: Reading and Writing
Number of items	A Total of 85 multiple-choice items Module 1: 35 multiple-choice items Module 2: 25 multiple-choice items Module 3: 25 multiple-choice items

Duration	90 minutes total 30 min/module
Passage / Stimulus word count	Module 1: 3 passages at 300–800 words per passage Module 2: 2 passages at 400–800 words per passage Module 3: several short passages, 25–100 words per passage
Number of items per passage/stimulus	1–13

The passages span a **range of complexity** aligned with grade levels 6–8, 9–11, and 12–14, ensuring that students are challenged progressively.

The assessment objectives of the EST I HS Literacy Test combine both writing and reading skills. The test is designed so that, by its completion, students are expected to demonstrate the ability to:

- Identify and analyze central ideas and themes within texts.
- Identify and interpret key details that support central ideas.
- Evaluate relationships between ideas, events, and concepts within and across texts.
- Identify and interpret evidence (textual and visual) that supports ideas and claims.
- Draw logical inferences and reasonable conclusions based on explicit and implicit information.
- Determine the meaning and connotation of words and phrases using contextual clues.
- Identify the purpose and main rhetorical aims of texts.
- Recognize and identify point of view, tone, and perspective.
- Identify and evaluate rhetorical strategies.
- Evaluate logic, reasoning, and validity of evidence.
- Synthesize information across multiple texts and visual information.
- Revise and develop ideas to clarify and support arguments, ideas, and purpose.
- Improve organization, coherence, and transitions within and between paragraphs.
- Revise language choice for improved clarity and consistency.
- Identify accurate sentence boundaries and grammatical structures.

The EST I HS Literacy Test applies the KARS model — Knowledge, Application, Reasoning, and Synthesis — to ensure that students are evaluated not only on basic recall but also on higher-order thinking skills essential for tertiary education.

- **Knowledge:** Recall details, identify main ideas, recognize explicit meaning, and distinguish fact from opinion.
- **Application:** Analyze arguments and text structure, improve clarity and organization, and apply grammar and English conventions.
- **Reasoning:** Draw inferences, evaluate evidence, assess rhetorical strategies, and examine connections within and across texts.
- **Synthesis:** Integrate information from multiple sources, identify relationships, interpret intent, and combine insights to form deeper conclusions.

By embedding the KARS framework, the EST ensures that students demonstrate a balanced progression from foundational knowledge to advanced synthesis, reflecting the skills required for success in higher education.

Table 2 provides a clear description of the cognitive levels and their distribution as assessed in the EST I HS literacy test.

Table 2: Distribution of Cognitive Levels in EST I HS Literacy Test:

Cognitive Level	Description	Weight
Knowledge	Recall details, identify main ideas, determine explicit meaning, and recognize facts and opinions.	20% – 30%
Application	Analyze arguments and text structure, improve clarity, transitions, and organization, and apply grammatical and structural conventions of English.	40% – 60%
Reasoning	Infer implicit meaning, draw conclusions, evaluate evidence, assess rhetorical strategies, and evaluate connections within and across texts.	20% – 30%
Synthesis	Identify relationships, draw inferences, interpret intent, and combine information from multiple sources; synthesize information across multiple texts and visual information.	10% – 20%

The EST I HS Literacy test (2026 specifications) introduces a streamlined, skills-aligned structure while maintaining the core strengths of the earlier EST I Literacy Tests (2020–2025 design). Previously, there were two separate tests—Language Usage (Literacy 1) and Reading Comprehension (Literacy 2). In the new format, these have been combined into one unified test with three integrated modules. This deliberate redesign preserves the proven constructs of prior iterations while incorporating enhancements that reflect evolving literacy assessment standards.

Key updates include:

- A reduction in the total number of test items
- Shorter overall testing time without compromising content coverage
- Carefully timed modules that align with the cognitive demands of each section
- Diversified passage lengths for varied reading challenges
- Clearer alignment with internationally recognized assessments
- Broader distribution of text complexity to match real-world literacy expectations

Table 3 will outline the specific differences between the previous test format and the updated 2026 design, identifying how the test structure evolved to better assess the students' literacy skills.

Table 3: Key Changes Between EST I Literacy Tests (2020-2025) and New EST I HS Literacy Test (2026)

	EST I Literacy (2020–2025)	EST I HS Literacy (2026 Specs)
Test Format	2 separate tests: Literacy 1 (Language Usage) Literacy 2 (Reading Comprehension)	1 unified test with 3 modules: Module 1: Writing Module 2: Reading Module 3: Reading and Writing
Total Items	96 items (44 Language Usage, 52 Reading Comprehension)	85 items (35 Writing, 25 Reading, 25 mixed Reading and Writing)
Total Time	100 minutes	90 minutes
Time per Question	Language Usage: 48 seconds Reading Comprehension: 75 seconds	Writing: 51 seconds Reading: 72 seconds Mixed Reading and Writing: 72 seconds
Passage Lengths	400–800 words (Language Usage & Reading Comprehension)	Modules 1 & 2: 300–800 words Module 3: 25–100 words
Stimulus Complexity	Complex texts only	Range of complexities (Grades 6–14), including edited texts
Item Design	Some items without stems	All items include stems (prompts)
Content Balance	Clear division between Language Usage and Reading Comprehension	Maintains distinction between Reading & Writing + adds an integrated module

EST I HS Math Test

The EST I High School Math Test is designed to assess students' understanding of key mathematical concepts and their ability to reason through problems efficiently and accurately. The test focuses on the most essential areas for college readiness, including algebra, functions, statistics and probability, and geometry. It emphasizes procedural fluency, a strong grasp of mathematical structure, and the ability to apply appropriate methods to arrive at correct solutions. This test provides a reliable measure of students' preparedness for university-level mathematics and quantitative coursework.

The test consists of 50 multiple-choice items administered in a single module. Students may use a scientific or graphing calculator throughout the entire test. Table 4 describes the test structure of EST I HS Math Test based on the 2026 specifications.

Table 4: EST I HS Math Test Structure

Number of tests/parts	1 test – 1 module
Number of items	50 multiple-choice items
Duration	75 minutes
Calculator Policy	Scientific and/or graphing calculators are allowed.

The assessment objectives of the EST I High School Math Test combine key domains from foundational algebra, data analysis and probability, advanced algebra and functions, and geometry and trigonometry (Table 5). The test is designed so that, by its completion, students are expected to demonstrate the ability to:

- Apply mathematical operations and rules, simplify expressions, and execute conversions in numerical calculations.
- Create linear equations and inequalities to represent relationships between quantities and interpret their graphs to solve problems.
- Create and analyze relationships using ratios, proportionality, percentages, and units
- Represent and analyze quantitative data.
- Find and apply probabilities in practical and theoretical contexts.
- Identify and create equivalent algebraic expressions.
- Create, analyze, and solve quadratic and other nonlinear equations.
- Manipulate different types of functions.
- Solve problems involving area and volume.
- Apply definitions and theorems related to lines, angles, circles, and polygons.
- Work with right triangles and trigonometric functions.

Table 5: Domains Covered in the EST 1 HS Math Test

Domain	Content	Weight
Foundational Algebra	Operations, simplification of expressions, conversions, absolute values, equality and inequality laws, linear equations and linear inequalities, linear graphs, inequality graphs, systems of equations, systems of inequalities	27% – 32%
Data Analysis and Probability	Average, mean, mode, median, rate problems and unit rates, ratios, percentages, proportions, scaling, data spread, variations (direct, inverse, and joint variation), tables and graphs (Venn diagrams, bar graphs, histograms, pie charts, line graphs, and box-and-whisker plots), scatterplots, nonlinear relationships, inferences, probability (counting, permutation, arrangements, combination, conditional)	27% – 32%
Advanced Algebra and Functions	Laws of exponents, radicals, complex numbers, equations of higher orders, functions and representation of functions, domains, ranges, compositions and transformations, quadratic functions (expressions, graphs, factorization), rational functions, reciprocal functions	27% – 32%
Geometry and Trigonometry	Lines, angles, triangles and other polygons, coordinate systems (distances and midpoints), the Pythagorean theorem and its converse, circles (arc lengths, radii, diameters, chords, tangents, arcs, and sectors), radian measures, areas and surface areas, volumes, congruence, similarity, trigonometry (sine, cosine, tangent)	8% – 13%

The EST I HS Math Test applies the KAR model—Knowledge, Application, and Reasoning—to ensure that students are evaluated not only on basic recall but also on higher-order thinking skills essential for tertiary education (Table 6).

Table 6: Distribution of Cognitive Levels in the EST I Math Test

Cognitive Level	Description	Weight
Knowledge	This level includes the recall of information such as facts, definitions, terms, or simple procedures, as well as performing basic algorithms or applying formulas.	35% - 45%
Application	This level includes the engagement of mental processing beyond a habitual response. This level may require multiple cognitive steps involving application or interpretation.	45% - 55%
Reasoning	This level requires reasoning, planning, using evidence, and engaging in a higher-level of thinking compared to the previous two levels. This may include using concepts to solve multi-step problems, explaining reasoning, or interpreting/extracting information from quantitative or qualitative data.	10% - 20%

The EST I HS Math Test (2026 specifications) restructures the assessment experience by replacing the former two-section structure (Math without calculator and Math with calculator) with a single test paper. While the previous design included 58 multiple-choice questions to be completed in 90 minutes, the new format consists of 50 multiple-choice questions administered in 75 minutes, with the use of a calculator permitted throughout. Although the mathematical content and skills assessed remain largely the same, the domain titles have been updated to more accurately reflect the scope and focus of the content. This shift reflects a move toward emphasizing mathematical reasoning, efficiency, and problem-solving skills over manual computation. Allowing calculators removes the barrier of lengthy arithmetic, enabling students to focus on applying concepts, analyzing patterns, and interpreting data—skills that are more predictive of college-level math success. Additionally, the streamlined structure reduces fatigue, leading to a more accurate measure of students' true mathematical proficiency.

Table 7 highlights the key differences between the previous EST I Math test and the redesigned 2026 EST I HS Math test, outlining the structural changes and updated domain titles, while maintaining the same core content.

Table 7: Key Changes Between EST I Math Tests (2020-2025) and New EST I HS Math Test (2026)

	EST I Math (2020–2025)	EST I HS Math (2026 Specs)
Test Format	2 separate tests Math without Calculator Math with Calculator	single unified test paper
Total Items	20 multiple-choice items in Math without Calculator 38 multiple-choice items in Math with Calculator Total of 58 multiple-choice items	50 multiple-choice items
Total Time	30 minutes Math without Calculator 55 minutes in Math with Calculator Total of 85 minutes	75 minutes
Time per Question	88 seconds	90 seconds
Content Topics and Domain Structure	Core high school math 4 domains <ul style="list-style-type: none"> • Basic Algebra • Information Analysis and Data Interpretation • Higher Math • Supplementary Content in Math 	Core high school math (<i>unchanged</i>) 4 domains (<i>titles revised to reflect content</i>) <ul style="list-style-type: none"> • Foundational Algebra • Data Analysis and Probability • Advanced Algebra and Functions • Geometry and Trigonometry

Assessment Design - EST II HS

The **EST II High School Subject Tests** are designed to assess students' knowledge and skills in specific academic disciplines, providing a focused measure of their readiness for advanced study in each subject area. A total of eight subjects are currently offered, reflecting a broad range of high school curricula. New 2026 assessment specifications will be introduced for Math Level 1, Math Level 2, Biology, Physics, and Chemistry, based on updated assessment practices, analysis of student performance data, and feedback from test takers and schools in the region. The remaining subjects—World History, English Literature, and Economics—will continue to follow their existing specifications, with the potential of additional subjects being added in the future. These subject-specific tests allow students to demonstrate proficiency in targeted areas and help schools and universities make informed placement and admissions decisions.

The following outlines which subjects will adopt the new 2026 specifications and which will continue under the current design.

EST II HS Math Tests (Level 1 and Level 2)

The EST II HS Math Level 1 and the EST II HS Math Level 2 Tests are designed to measure students' mastery of high school mathematics and their readiness for advanced study in mathematics-intensive fields. Each test consists of 40 multiple-choice items and allows the use of a scientific or graphing calculator throughout (Table 8).

Both tests emphasize conceptual understanding, procedural fluency, and mathematical reasoning, while also requiring students to apply problem-solving skills across a range of topics. Table 8 outlines the structure of both tests.

Table 8: Structure of EST II HS Math Level 1 and Math Level 2 Tests

Number of items	40 multiple-choice items
Duration	60 minutes
Calculator Policy	Scientific and/or Graphing calculators are allowed.

The **EST II HS Math Level 1** test assesses foundational mathematical knowledge, focusing on algebra, functions, geometry, basic trigonometry, data analysis, and probability. It provides students with an opportunity to demonstrate proficiency in the core concepts and skills typically covered in early to mid-high school mathematics (Table 9).

By the end of the Math Level 1 test, students are expected to demonstrate the ability to:

- Perform operations with numbers and expressions, and apply ratios, proportions, and percentages in problem-solving.
- Analyze and solve linear and quadratic equations and inequalities, as well as systems of equations and inequalities, and represent their solutions graphically.
- Create and interpret algebraic expressions and functions (polynomial and rational).
- Apply geometric properties of lines, angles, polygons, and circles to solve problems.
- Use coordinate geometry to analyze lines, distances, transformations, and equations of circles and parabolas.
- Apply basic trigonometric ratios to solve right-triangle problems.
- Represent, analyze, and interpret data using graphs and statistical measures (mean, median, mode, range, quartiles, and interquartile range).
- Use counting principles, permutations, combinations, and basic probability to solve problems.
- Demonstrate mathematical reasoning, accuracy, and the ability to select appropriate strategies for problem-solving.

Table 9: Domains Covered in the EST II HS Math Level 1 Test

Domain	Content	Weight
Numerations and Operations	Operations, ratios and proportions, elementary number theory (prime decomposition and odd and even numbers), arithmetic and geometric sequences	10% – 15%
Algebra and Functions	Expressions, equations (linear and quadratic, system of two equations), inequalities (simple and compound, graphing inequalities with one or two variables, system of linear inequalities), fractions, percentages, exponents, absolute values, composition of functions, inverse functions, properties of functions (polynomial and rational, including graphing)	25% – 30%
Plane Shapes / Measurement	Lines, segments, rays, angles (acute, obtuse, right, complementary, supplementary), parallel and perpendicular lines, triangles (angles in triangles, sides of triangles, types of triangles, Pythagorean theorem, and perimeters and areas), polygons and circles (special quadrilaterals, angles, perimeters, circumferences, areas, lengths of arcs of circles, tangents to circle laws, and inscribed triangles and quadrilaterals), congruence and similarity	20% – 25%

Coordinate Systems	Equations of lines, slopes, distances, midpoints, circles and parabolas equations, symmetry (axis of symmetry, centers of symmetry, and symmetry about y-axis, x-axis, and the origin), transformations (translations, stretching, shrinking, compressing, and reflections)	10% – 15%
Trigonometry	Right triangles (Pythagorean theorem, sine, cosine, and tangent), identities (Pythagorean identity for sine and cosine, quotient and reciprocal identities)	5% – 10%
Data Analysis, Statistics, and Probability	Mean, median, mode, range, quartiles, interquartile range, graphs and plots, linear least-squares regression, counting, permutations, arrangements, combinations	15% – 20%

The **EST II HS Math Level 2** builds upon the concepts assessed in the EST II HS Math Level 1, extending into more advanced areas of mathematics, such as complex numbers, matrices, vectors, logarithmic and trigonometric functions, three-dimensional geometry, and advanced statistics and probability. It is designed for students who have completed rigorous high school math coursework and are prepared to demonstrate advanced problem-solving and analytical skills (Table 10).

By the end of the EST II HS Math Level 2 test, students are expected to demonstrate the ability to:

- Work with complex numbers, matrices, vectors, and sequences to represent and solve mathematical problems.
- Apply advanced algebraic techniques to solve systems of equations and inequalities, and represent their solutions graphically.
- Analyze and create functions, including polynomial, rational, exponential, logarithmic, trigonometric, and inverse trigonometric functions.
- Apply properties and theorems of three-dimensional shapes to calculate areas, surface areas, and volumes
- Use analytical geometry to investigate conic sections and three-dimensional coordinate problems.
- Apply trigonometric identities, laws of sines and cosines, and radian measures to solve complex problems.
- Interpret and analyze data using statistical measures (mean, median, mode, range, quartiles, interquartile range, standard deviation, regression) and apply counting principles and other probability concepts (permutations, combinations, and conditional).
- Integrate knowledge from multiple mathematical domains to solve complex and multi-step problems.
- Demonstrate higher-order reasoning, synthesis, and analytical thinking in mathematical contexts.

Table 10: Domains Covered in the EST II HS Math Level 2 Test

Domain	Content	Weight
Numerations and Operations	Operations, ratios and proportions, complex numbers (conjugates, modulus, complex plane, comparing sides of an equation), elementary number theory (prime decomposition and odd and even numbers), matrices (products, additions, and subtracting two matrices, determinants and identities matrix), sequences (arithmetic and geometric), vectors (resultants, norms, directions, and parallel and perpendicular vectors)	20% – 25%
Algebra and Functions	Expressions, equations (linear, quadratic, and cubic equations, real and imaginary solutions, system of two and three equations), inequalities (simple and compound, graphing inequalities with one or two variables, system of linear inequalities), fraction, percentages, exponents, absolute values, composition of functions, inverse functions, properties of functions (polynomial, rational, exponential, logarithmic, trigonometric, inverse trigonometric, and periodic including graphing and asymptotes)	30% – 35%
Coordinate Systems	Equations of lines, slopes, distances, midpoints, circles, parabolas, ellipses, and hyperbolas equations	5% – 10%
Solid Shapes	Surface areas, lateral areas, and volumes (Cylinders, cones, prisms, pyramids, spheres), coordinates in three dimensions (distances and midpoints)	10% – 15%
Trigonometry	Right triangles (Pythagorean theorem, sine, cosine, and tangent), identities and double angle formulae, radian measures, law of cosines, law of sines, trigonometric equations	10% – 15%
Data Analysis, Statistics, and Probability	Mean, median, mode, range, quartiles, interquartile range, standard deviation, graphs and plots, linear least-squares regression, counting, permutations, arrangements, combinations, conditional probability	10% – 15%

Both the EST II HS Math Level 1 and EST II HS Math Level 2 tests use a balanced distribution of cognitive levels—Knowledge, Application, Reasoning, and Synthesis—to ensure that students are assessed not only on what they know but also on how effectively they can apply and connect mathematical concepts (Table 11).

Table 11: Distribution of Cognitive Levels in EST II Math Subject Tests

Cognitive Level	Description	Weight
Knowledge	This level assesses students' ability to recall basic scientific definitions, theorems, and phenomena.	10% - 20%
Application	This level assesses students' ability to apply formulae, equations, and laws in simple situations.	40% - 50%
Reasoning	This level assesses students' ability to apply formulae, equations, and laws in complex and real-life situations, and interpret and extract information from quantitative and qualitative data.	25% - 35%
Synthesis	This level assesses students' ability to use their prior knowledge to solve problems in a novel situation, linking multiple concepts.	5% - 15%

The EST II HS Math Subject Tests have been redesigned to provide a more focused and balanced assessment experience. The previous format consisted of 50 questions to be completed in 60 minutes, while the new design includes 40 questions in the same time frame (60 minutes). This adjustment allows students more time to think through each question (from 1.2 minutes per question to 1.5 minutes per question), helping reduce time pressure and test anxiety while encouraging deeper reasoning and problem-solving.

In addition to structural adjustments, several advanced or low-priority concepts were removed from both Math Level 1 and Math Level 2 tests. These updates were informed by analysis of student performance data, feedback from test takers and schools, and evolving assessment practices in the region. The focus is now on the most essential concepts and skills, ensuring that the tests accurately reflect high school learning outcomes and readiness for higher education.

Table 12 outlines the key changes introduced to the 2026 EST II Math Level 1 and Math Level 2 tests specifications, detailing structural and content refinements designed to enhance the assessment experience for students.

Table 12: Key Changes Between EST II Math Subject Tests and EST II HS Math Subject Tests

	EST II Math Subject Tests (2020–2025)	EST II HS Math Subject Tests (2026 Specs)
Total Items	50 items	40 items
Total Time	60 minutes	60 minutes
Time per Question	~ 70 seconds	~ 90 seconds
Content Coverage – EST II HS Math Level 1	Included topics like cubic equations, exponential/logarithmic functions, 3D geometry, logic, conditional probability, and double-angle formulas	These topics were removed to focus on core high school concepts.
Content Coverage – EST II HS Math Level 2	Included topics like series, piecewise/recursive/parametric functions, polar coordinates, symmetry, transformations, quadratic/exponential regression	These topics were removed to focus on core high school and pre-university concepts.

EST II HS Physics

The EST II HS Physics Test is designed to evaluate students' understanding of fundamental physical principles, their ability to apply scientific reasoning, and their readiness for advanced study in physics and related STEM fields. The test consists of 60 selected response items and allows the use of a scientific calculator (Table 13).

Table 13: Structure of EST II HS Physics Test

Number of items	60 selected response items
Assessment Paper Design	Two parts: Part A: Recalling fact items (15 – 20 items) Part B: Multiple choice items (40 – 45 items)
Duration	60 minutes
Calculator Policy	Scientific calculators are allowed.

The test is divided into **two parts**, each targeting different cognitive skills. **Part A: Recalling Facts questions** assess students' ability to remember and recognize essential information. Each set includes a group of lettered choices followed by numbered questions or statements. Students are expected to select the lettered choice that best matches each item. A choice may be used once, more than once, or not at all. **Part B: Multiple-Choice Questions (MCQs)** present a question stem followed by several alternatives. After reading the question or scenario in the stem, students must analyze the given information, apply relevant knowledge, and identify the correct answer from the provided alternatives. This structure assesses a range of skills, moving from factual knowledge to application, analysis, and higher-order reasoning, providing a more comprehensive picture of students' understanding of Physics and their readiness for advanced study.

The EST II HS Physics Test emphasizes both conceptual understanding and quantitative problem-solving skills, requiring students to interpret data, analyze experimental scenarios, and apply physics laws to varied situations. By the end of the test, students are expected to demonstrate the ability to:

- Apply Newton's laws and principles of forces to analyze and predict the motion of objects.
- Use kinematic equations and energy principles to solve problems involving motion, work, power, and momentum.
- Analyze electric and magnetic fields, electric circuits, and electromagnetic induction using relevant laws and equations.
- Interpret and solve problems involving waves, sound, light, and optical instruments.
- Apply the laws of thermodynamics to analyze heat transfer, thermal energy, and the efficiency of systems.
- Explain and analyze phenomena related to quantum physics, atomic structure, radioactivity, and nuclear reactions.
- Interpret data from tables, charts, and experimental setups to draw logical conclusions.
- Select and apply appropriate mathematical models, formulas, and problem-solving strategies.
- Demonstrate scientific reasoning, critical thinking, and the ability to integrate concepts across different physics domains.

The EST II Physics Test covers five major content domains that represent the foundational areas of high school physics. Each domain is assigned a specific weight to ensure balanced coverage of mechanics, electricity, waves, thermodynamics, and modern physics. This distribution allows the test to assess a wide range of physics knowledge and skills (Table 14).

Table 14: Domains Covered in the EST II HS Physics Test

Domain	Content	Weight
Mechanics	Scalar and vector quantities, center of gravity and center of mass, uniform motion and uniformly accelerated motion, distance, displacement, speed, velocity, acceleration, freefall, projectile motion, circular motion, forces, Newton's laws of motion, Newton's law of universal gravitation, energy, Hooke's law, power, work, linear momentum, impulse, moment, torque, oscillatory motion	35% – 40%
Electrostatics, Circuits, and Magnetism	Electric charge, Coulomb's law, electric fields, electric force, electric potential, charging and discharging capacitors, capacitance, charges in parallel plates, series and parallel circuits, electric current, voltage, Ohm's law, equivalent resistance, electric power, magnets, magnetic field, magnetic force, electromagnetic induction, Faraday's law	25% – 30%
Waves and Optical Phenomena	Properties of waves (amplitude, wavelength, frequency, period, speed, and phase), types of waves, superposition, interference of waves, standing waves, Doppler effect, electromagnetic waves, law of reflection, law of refraction, diffraction, interference of light, image produced by mirrors, Snell's law, lenses	15% – 20%
Thermodynamics	Laws of thermodynamics, efficiency of heat engines, heat (temperature, change in state, heat transfer, specific and latent heat, and thermal energy), open and closed systems	5% – 10%
Modern Physics	Quantum phenomena (photons and photoelectric effect), Rutherford model, Bohr model, energy level of atoms, emission and absorption spectra, atomic nucleus, radioactivity and nuclear reaction, radioactive decay, half-life, fission and fusion reactions	5% – 10%

The EST II Physics Test includes a dedicated Math Skills and Graph/Table Analysis component, which represents about 15%–25% of the test (approximately 9–15 questions). This component assesses students' ability to apply a range of mathematical concepts—such as slope, proportionality, linear and inverse relationships (including inverse-squared), algebraic identities, and geometry concepts involving angles, polygons, surface area, and volumes of shapes. These skills are essential for interpreting data, analyzing visual representations, and solving calculation-based physics problems accurately and efficiently.

To ensure a comprehensive evaluation of students' abilities, the EST II HS Physics Test distributes its questions across multiple cognitive levels. This balanced structure assesses not only students' ability to recall factual knowledge but also their ability to apply concepts, reason through complex problems, and demonstrate higher-order thinking skills (Table 15).

Table 15: Distribution of Cognitive Levels in EST II HS Physics Tests

Cognitive Level	Description	Weight
Knowledge	This level assesses students' ability to recall basic scientific definitions, theorems, and phenomena.	25% - 30%
Application	This level assesses students' ability to apply formulae, equations, and laws in simple situations.	40% - 45%
Reasoning	This level assesses students' ability to apply formulae, equations, and laws in complex and real-life situations and interpret and extract information from quantitative and qualitative data.	30% - 35%

The EST II HS Physics Subject Test has been updated to provide a more focused and balanced assessment experience. The number of questions has been reduced from 75 to 60, while the testing time remains 60 minutes, giving students more time per question (from ~48 seconds to ~60 seconds) and reducing the cognitive load (Table 16). This structural change is designed to help students approach questions more thoughtfully, apply concepts more accurately, and reduce test fatigue.

As part of the new 2026 specifications, several low-priority or highly advanced topics have been removed from the test based on student performance data, curriculum alignment, and feedback from test takers and schools. This refinement ensures that the test measures students' understanding of the most essential physics concepts and skills needed for success in higher education.

Table 16: Key Changes Between EST II Physics Subject Test and EST II HS Physics Subject Test

	EST II Physics Subject Tests (2020–2025)	EST II HS Physics Subject Tests (2026 Specs)
Total Items	75 items	60 items
Total Time	60 minutes	60 minutes
Time per Question	~ 48 seconds	~ 60 seconds

Content Coverage – EST II HS Physics	Included topics like satellites in circular orbits; Efficiency; Lenz's law; Linear polarization; Colors; Entropy; Ideal gas; Special relativity (time dilation, length contraction, mass increase, mass-energy equivalence); General physics history; Universe; Theory of superconductivity; Chaos theory; Semiconductors; Microprocessors; Astrophysics and dark matter	These topics were removed to focus on core high school concepts.
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EST II HS Chemistry

The EST II HS Chemistry Subject Test is designed to measure students' understanding of fundamental chemical concepts, their ability to apply scientific principles, and their readiness for advanced study in chemistry and related STEM fields. The test consists of 60 selected response items to be completed in 60 minutes and allows the use of a scientific calculator (Table 17).

Table 17: Structure of EST II HS Chemistry Test

Number of items	60 selected response items
Assessment Paper Design	Two parts: Part A: Recalling fact items (15 – 20 items) Part B: Multiple choice items (40 – 45 items)
Duration	60 minutes
Calculator Policy	Scientific calculators are allowed.

The test is divided into **two parts, each designed** to target different cognitive skills. **Part A: Recalling Facts questions** assess students' ability to remember and recognize essential information. Each set includes a group of lettered choices followed by numbered questions or statements. Students are expected to select the lettered choice that best matches each item. A choice may be used once, more than once, or not at all. **Part B: Multiple-Choice Questions (MCQs)** presents question stems followed by several alternatives that require students to analyze information, apply relevant knowledge, and select the correct answer. This structure assesses a continuum of skills, moving from factual knowledge to application, analysis, and higher-order reasoning. It provides a more comprehensive measure of students' understanding of chemistry and their readiness for advanced study.

The EST II HS Chemistry test emphasizes conceptual understanding, analytical thinking, and quantitative problem-solving skills, requiring students to interpret experimental data, analyze chemical reactions, and apply principles to unfamiliar situations. By the end of the test, students are expected to demonstrate the ability to:

- Recall and explain essential chemical principles, definitions, and laws related to structure, bonding, reactions, and properties of matter.
- Apply chemical formulas, equations, and laws to solve quantitative problems in stoichiometry, gas laws, thermochemistry, and equilibrium.
- Analyze experimental data, graphs, and tables to identify patterns, conclude, and justify scientific claims.
- Predict the behavior of substances based on their structure, bonding, periodic trends, and intermolecular forces.
- Interpret and solve problems involving chemical reactions, acids and bases, oxidation-reduction processes, and electrochemical systems.
- Calculate solution concentrations, gas variables, energy changes, and equilibrium constants in various chemical systems.
- Evaluate the factors affecting reaction rates and equilibrium, and apply principles like Le Châtelier's to explain system responses.
- Demonstrate safe and accurate use of laboratory equipment, procedures, and error minimization techniques.
- Integrate concepts from different chemistry domains to explain and solve complex, multi-step problems.

The EST II HS Chemistry Test covers five major content domains that represent the core areas of high school chemistry. Each domain is assigned a specific weight to ensure a balanced coverage of foundational concepts, reactions, behavior of matter, kinetics and equilibrium, and experimental skills. This distribution ensures that students are assessed on a broad spectrum of chemical knowledge (Table 18).

Table 18: Domains Covered in the EST II HS Chemistry Test

Domain	Content	Weight
Foundations of chemistry: Atoms, bonds, and Periodic properties	Atomic structure, isotopes, electron configuration and valency, ions, quantum numbers, types of chemical bonding, Lewis structure, VSEPR, hybridization, polarity (polar and non-polar bonds/molecules), intermolecular and intramolecular forces, Periodic table classification (Mendeleev and modern), position and families of elements, physical and chemical properties of elements, periodic table trends, simple organic and inorganic compounds, nomenclature.	25% - 35%
Chemical Reactions and Quantitative Chemistry	Types of reactions, acids and bases, pH and indicator, titration, oxidation and reduction (including oxidation numbers), electrochemistry, activity series of metals, mole relationships, mean molar mass, finding empirical and molecular formulas, law of conservation of mass and balancing chemical equations, stoichiometric calculations.	20% - 25%
Chemical Behavior (aqueous solutions and gaseous state)	Solution (properties and concentration calculations), colligative properties, solubility (factors, curve, K_{sp}), change of physical states (phase diagram), kinetic theory of gases, law of partial pressures, gas laws.	15% - 20%
Chemical Kinetics and Chemical Equilibrium	Heat transfer, molar heat of reactions, enthalpy of reaction, Hess's law, bond energies ΔE , collision theory, energy diagrams, reaction rates, equilibrium in reversible reactions, expressing and calculating equilibrium constants, dynamic equilibrium, Le Châtelier's principle.	15% - 20%
Experimental Chemistry	Lab safety, lab equipment, lab setup, solution preparation protocols, separation techniques, minimize and calculate errors, basic environmental phenomena, qualitative tests.	10% - 15%

To ensure a balanced assessment of students' knowledge and thinking skills, the EST II Chemistry Test distributes its questions across three cognitive levels. This structure evaluates not only students' ability to recall fundamental definitions and concepts, but also their capacity to apply chemical principles to solve problems and to reason through complex data and scenarios. This balance ensures a comprehensive measure of students' preparedness for advanced studies in chemistry (Table 19).

Table 19: Distribution of Cognitive Levels in EST II HS Chemistry Tests

Cognitive Level	Description	Weight
Knowledge	This level assesses students' ability to recall basic scientific definitions, theorems, and phenomena.	22% - 32%
Application	This level assesses students' ability to apply formulae, equations, and laws in simple situations.	38% - 52%
Reasoning	This level assesses students' ability to apply formulae, equations, and laws in complex and real-life situations and interpret and extract information from quantitative and qualitative data.	24% - 34%

The 2026 EST II HS Chemistry Test has been redesigned to make the assessment more focused, balanced, and aligned with current high school chemistry curricula. The previous version consisted of 85 questions to be completed in 60 minutes, while the new design includes 60 questions in 60 minutes. This gives students more time per question (from ~42 seconds to ~60 seconds), reducing cognitive load and test fatigue while encouraging deeper reasoning and application of concepts (Table 20).

The test has been streamlined from seven content areas to five broader domains, with some low-priority or rarely taught topics removed. The changes are based on performance data, curriculum analysis, and feedback from schools and test takers, and aim to improve the clarity, focus, and fairness of the assessment.

Table 20: Key Changes Between EST II Chemistry Subject Test and EST II HS Chemistry Subject Test

	EST II Chemistry Subject Tests (2020–2025)	EST II HS Chemistry Subject Tests (2026 Specs)
Total Items	85 items	60 items
Total Time	60 minutes	60 minutes
Time per Question	~ 42 seconds	~ 60 seconds
Content Domain	<p>7 domains (<i>many narrow topics</i>)</p> <ul style="list-style-type: none"> • Atomic Theory & Chemical Bonding • Chemical Reactions • Chemical Behavior (Aqueous solutions and gaseous state) • Periodic Table and Periodic Trends • Quantitative Chemistry • Chemical Kinetics and Chemical Equilibrium • Experimental Chemistry 	<p>5 broader domains</p> <ul style="list-style-type: none"> • Foundations of chemistry: Atoms, bonds, and Periodic properties • Chemical Reactions and Quantitative Chemistry • Chemical Behavior (aqueous solutions and gaseous state) • Chemical Kinetics and Chemical Equilibrium • Experimental Chemistry
Content Coverage – EST II HS Chemistry	<p>Included topics like metallic bonding, coordinate covalent bonds, crystalline structures, resonance, buffers, molality, thermodynamic variables (ΔU, ΔS, ΔG), first and second law of thermodynamics, reaction intermediates, rate-determining steps</p>	<p>These topics were removed to focus on core high school concepts.</p>

EST II HS Biology

The EST II HS Biology Subject Test is designed to assess students' understanding of fundamental biological concepts, their ability to apply scientific knowledge, and their readiness for advanced study in life sciences and related STEM fields. The test consists of 60 selected response items to be completed in 60 minutes and allows the use of a scientific calculator (Table 21).

Table 21: Structure of EST II HS Biology Test

Number of items	60 selected response items
Assessment Paper Design	Two parts: Part A: Recalling fact items (15 – 20 items) Part B: Multiple choice items (40 – 45 items)
Duration	60 minutes
Calculator Policy	Scientific calculators are allowed

The EST II HS Biology test is divided into **two parts**, each targeting different cognitive skills. **Part A: Recalling Facts** questions assess students' ability to remember and recognize essential biological information. Each set includes a group of lettered choices followed by numbered questions or statements. Students are expected to select the lettered choice that best matches each item. A choice may be used once, more than once, or not at all. **Part B: Multiple-Choice Questions (MCQs)** present a question stem followed by several alternatives. After reading the question or scenario in the stem, students must analyze the given information, apply relevant knowledge, and select the correct answer from the provided alternatives. This structure assesses a continuum of skills, moving from factual knowledge to application, analysis, and higher-order reasoning, providing a comprehensive measure of students' understanding of biology and their readiness for advanced study.

The EST II HS Biology Test emphasizes conceptual understanding, analytical thinking, and data interpretation skills, requiring students to analyze biological processes, interpret experimental data, and apply principles to unfamiliar scenarios. By the end of the test, students are expected to demonstrate the ability to:

- Recall and explain essential biological concepts, processes, and structures across molecular, cellular, organismal, and ecological levels.
- Analyze the structure and function of cells and organelles, and explain processes such as mitosis, photosynthesis, and cellular respiration.
- Apply principles of genetics to explain patterns of inheritance, gene transmission, chromosomal abnormalities, and molecular genetics mechanisms.
- Interpret data from biological experiments, graphs, and tables to identify relationships, trends, and valid scientific conclusions.

- Explain the structure, function, regulation, and interactions of major human body systems and plant systems.
- Analyze ecological relationships, energy flow, matter cycling, and factors affecting biodiversity within ecosystems.
- Apply evolutionary theory and mechanisms to explain patterns of variation, adaptation, and change over time.
- Classify organisms using taxonomic principles and apply binomial nomenclature accurately.
- Integrate knowledge from different biology domains to solve multi-step problems and demonstrate scientific reasoning.

The EST II HS Biology Test covers five major content domains, representing the core areas of high school biology. Each domain is assigned a specific weight to ensure balanced coverage of molecular, organismal, and ecological concepts. This distribution allows the test to assess a broad range of biological knowledge and skills (Table 22).

Table 22: Domains Covered in the EST II HS Biology Test

Domain	Content	Weight
Cell Structure and Molecular Biology	Cell components and function, mitosis, enzymatic activity, cellular respiration and fermentation, biosynthesis, photosynthesis.	25% - 30%
Ecology	Levels of organization, biotic and abiotic factors, relationship between organisms, flow of energy in ecosystems, cycling of matter, ecosystem, biodiversity.	15% - 20%
Genetics and Heredity	Gene transmission, chromosomal abnormalities, meiosis, production of sex cells, molecular genetics.	15% - 20%
Body Systems and Plants	Human body systems and regulation, plant structure, plant function and regulation, reproduction and growth, animal behavior	15% - 20%
Classification and Evolution	Taxonomic categories and binomial nomenclature, allele frequency in a population, evolution theory and mechanism, parental relationships.	15% - 20%

To ensure a balanced assessment of students' knowledge and thinking skills, the EST II Biology Test distributes its questions across three cognitive levels. This structure evaluates not only students' ability to recall core biological facts and concepts, but also their capacity to apply scientific principles and reason through complex data, processes, and scenarios. This balance supports a comprehensive measure of students' preparedness for advanced studies in biology (Table 23).

Table 23: Distribution of Cognitive Levels in EST II HS Biology Test

Cognitive Level	Description	Weight
Knowledge	This level assesses students' ability to recall basic scientific definitions, theorems, and phenomena.	25% - 30%
Application	This level assesses students' ability to apply formulae, equations, and laws in simple situations.	35% - 40%
Reasoning	This level assesses students' ability to apply formulae, equations, and laws in complex and real-life situations and interpret and extract information from quantitative and qualitative data.	30% - 35%

The EST II HS Biology Test has been redesigned to provide a more focused, balanced, and curriculum-aligned assessment of students' knowledge and reasoning skills in life sciences. The previous version of the test consisted of 80 questions to be completed in 60 minutes, while the 2026 version includes 60 questions in the same time frame, giving students more time per question (from ~45 seconds to ~60 seconds), reducing time pressure and test fatigue, and supporting deeper reasoning and accurate application of biological concepts.

In addition, the content structure has been streamlined. The test continues to cover five major domains, but several low-priority or overly detailed topics have been removed to ensure stronger alignment with core high school biology curricula (Table 24). These refinements are based on performance data and feedback from test takers and schools, and aim to make the assessment clearer, fairer, and more reflective of students' actual learning.

Table 24: Key Changes Between EST II Biology Subject Test (2020-2025) and EST II HS Biology Subject Test (2026)

	EST II Biology Subject Tests (2020–2025)	EST II HS Biology Subject Tests (2026 Specifications)
Total Items	80 items	60 items
Total Time	60 minutes	60 minutes
Time per Question	~ 45 seconds	~ 60 seconds
Content Coverage – EST II HS Physics	Included topics like: Energy expenditure, Basal metabolism, Community ecology, Biomes, Population ecology, Inherited genetic diseases, Genetic recombination, Animal body systems, Hormonal communication and regulation in animals, Human evolution	These topics were removed to focus on core high school concepts.

EST II HS Economics

The EST II HS Economics Subject Test is designed to assess students' understanding of key economic principles, their ability to apply economic models, and their readiness for advanced study in economics and related fields. The test consists of 60 multiple-choice questions administered in 60 minutes and allows the use of a scientific calculator (table 25).

Table 25: Structure of EST II HS Economics Test

Number of items	60 multiple-choice items
Duration	60 minutes
Calculator Policy	Scientific and/or Graphing calculators are allowed.

The Test includes a variety of question types designed to assess different dimensions of economic thinking and problem-solving. These include **fact-based questions**, which assess the recall and understanding of key economic principles and definitions; **calculation questions**, which require applying formulas and performing quantitative operations; **scenario-based questions**, which ask students to analyze real-world situations and apply economic reasoning to select the best response; and **graph/chart-based questions**, which involve interpreting and analyzing data presented in visual formats such as graphs, tables, and charts. This combination of question types ensures students are assessed on a broad range of knowledge, application, and reasoning skills (Table 26).

Table 26: Genre of Question in EST II HS Economics Test

Genre	Explanation	Weight
Fact-based questions	These questions require the test taker to recall and apply specific information from economic theories, concepts, or data. They typically have a clear-cut and objective answer and are designed to test the understanding of key economic principles.	40%
Calculation questions	These questions involve performing mathematical operations to arrive at a numerical answer. They typically require using formulas, equations, or graphs to solve a problem or make a decision.	30%
Scenario-based questions	These questions present a situation or problem and ask the test-taker to choose the best answer among the available options based on the given scenario. They are designed to test the test-taker's ability to apply economic concepts and principles to real-world situations.	15%
Graph/chart-based questions	These questions involve a visual representation of data, such as a line graph, bar chart, or pie chart, and require students to interpret the data and select the best answer from a set of multiple-choice options.	15%

The EST II HS Economics Test emphasizes conceptual understanding, analytical thinking, and data interpretation skills, requiring students to analyze graphs, interpret economic data, and apply economic reasoning to diverse scenarios. By the end of the test, students are expected to demonstrate the ability to:

- Recall and explain essential economic principles, theories, and definitions related to microeconomics and macroeconomics.
- Apply economic models, formulas, and concepts (such as supply and demand, elasticity, and production theory) to analyze market situations.
- Interpret and analyze economic data presented in graphs, tables, and charts to identify trends, patterns, and relationships.
- Evaluate the impact of government policies, fiscal and monetary measures, and international trade on economic performance.
- Analyze the interactions between consumers, producers, workers, and governments within an economy.
- Calculate and interpret key economic indicators, including GDP, inflation rates, and unemployment levels.

- Assess the role of financial institutions, banking systems, and capital markets in supporting economic activity.
- Explain the influence of globalization, trade policies, and international organizations on economic development.
- Demonstrate economic reasoning, critical thinking, and decision-making skills when solving real-world economic problems.

The EST II HS Economics Test covers seven major content domains, representing the core areas of high school economics. Each domain is assigned a specific weight to ensure balanced coverage of foundational economic principles, market dynamics, government roles, and global economic issues. This distribution allows the test to assess a broad range of economic knowledge and skills while maintaining a consistent focus on the most essential learning outcomes (Table 27).

Table 27: Domains Covered in the EST II HS Economics Test

Domain	Content	Weight
Economics and Choice	Basic concepts of economics, such as scarcity, opportunity cost, and the principles of microeconomics and macroeconomics.	10%
Market Economies at Work	Concepts of supply and demand, market equilibrium, and the impact of government intervention on market outcomes. It also covers the role of businesses in the market economy and the impact of competition on market performance.	20%
Partners in the Economy	Relationship between businesses, workers, and consumers in the economy. It explores topics such as labor markets, income distribution, and the role of government in promoting economic growth and development.	10%
Money, Banking, and Finance	Fundamental concepts of money, banking, and finance, including the functions of money, the role of banks and financial institutions, and the impact of monetary policy on the economy.	15%
Measuring and Monitoring Economic Performance	Methods used to measure and monitor economic performance, including gross domestic product (GDP), inflation, and unemployment. It also explores the challenges of measuring economic well-being and the limitations of economic indicators.	20%

The Role of Government in the Economy	Role of government in the economy, including government revenue and spending, fiscal policy, and the central bank. It also explores the impact of international trade and globalization on the economy.	15%
The Global Economy	Benefits and issues of international trade, trade barriers, and the modern international institutions. It also explores the economic development objectives and the transition to a market economy.	10%

To ensure a balanced assessment of students' knowledge and thinking skills, the EST II Economics Test distributes its questions across three cognitive levels. This structure evaluates not only students' ability to recall fundamental economic concepts and definitions, but also their capacity to apply economic models and reason through complex data, policies, and real-world scenarios. This balance provides a comprehensive measure of students' preparedness for advanced studies in economics (Table 28).

Table 28: Distribution of Cognitive Levels in EST II HS Economics Tests

Cognitive Level	Description	Weight
Knowledge	This level assesses students' ability to recall basic economic definitions, theories, and principles (example: defining GDP, inflation, or the law of supply and demand).	30%
Application	This level assesses students' ability to apply economic concepts, formulae, and models in simple situations (example: calculating the elasticity of demand or interpreting a production possibilities frontier).	50%
Reasoning	This level assesses students' ability to analyze and interpret economic data and use economic models to explain real-world phenomena (example: analyzing the impact of a government policy on the economy or interpreting a graph of market demand and supply).	20%

The EST II Economics Subject Test was introduced in 2024 and currently follows its original specifications, with no changes applied. It provides a reliable measure of students' understanding of core economic principles and their ability to apply analytical and reasoning skills.

EST II HS English Literature

The EST II HS English Literature Subject Test is designed to assess students' reading comprehension, literary analysis, and critical interpretation skills, as well as their readiness for advanced study in literature and the humanities. The test consists of 60 multiple-choice questions administered in 60 minutes. The questions are based on six to eight literary passages, drawn primarily from British and American literature, with occasional selections from other English-speaking regions. Passages cover a range of genres (prose, poetry, and drama) and time periods (from the Renaissance to the present), ensuring diverse literary coverage (Table 29).

Table 29: Structure of EST II HS English Literature Test

Number of items	60 multiple-choice items
Duration	60 minutes
Passages	6–8 passages (<i>each followed by 4–12 questions</i>)
Passage Sources	Primarily British and American literature, with occasional texts from other English-speaking regions
Genres	3–4 prose, 3–4 poetry, 0–1 drama
Time Periods Covered	2–3 pre-18th century, 2–3 18th–19th century, 2–3 20th–21st century

The EST II HS Literature Subject Test emphasizes students' ability to read closely, interpret meaning, and analyze how language creates effect in literary texts. It assesses skills such as identifying tone, mood, and theme; recognizing point of view; analyzing literary and rhetorical devices; and understanding the meaning of words and phrases in context. By the end of the test, students are expected to demonstrate the ability to:

- Read and interpret prose, poetry, and drama from various literary periods and genres.
- Identify the speaker, audience, setting, and events described in literary texts.
- Analyze tone, mood, theme, and purpose across a range of literary passages.
- Interpret the meaning of words and phrases in context (both literal and figurative).
- Recognize and analyze literary and rhetorical devices (such as metaphor, simile, imagery, symbolism, and hyperbole).
- Evaluate the narrator's or speaker's point of view, attitude, and voice.
- Analyze character traits, motivations, and development within a passage.
- Analyze dialogue for tone, meaning, and function in the text.
- Synthesize textual evidence to support interpretations and draw reasoned conclusions.

The EST II HS English Literature Test assesses a range of reading and analytical skills that reflect the core competencies required for advanced study in literature. Each skill area is assigned a specific weight to ensure balanced coverage of comprehension, interpretation, and critical analysis (Table 30). This distribution allows the test to evaluate how well students can understand literary texts, interpret language and structure, and assess the use of literary techniques across different genres and historical periods.

Table 30: Skills covered in EST II HS English Literature Test

Skill	What is being assessed	Weight
Reading Comprehension	Identify the speaker, audience, or events described	20-25%
Meaning of Words and Phrases in Context	Identify words in context (denotative [literal] meaning OR connotative [implied] meaning)	10-13%
General Elements	Identify tone, mood, theme, purpose or argument; identify description of language used	20-27%
Literary and Rhetorical Devices	Identify literary and rhetorical devices (ex. hyperbole, metaphor, etc.); identify use of literary or rhetorical devices in the text	8-13%
Metaphor and Simile	Identify a metaphor or simile (or what is <i>not</i> a metaphor or simile); identify meaning of a metaphor or simile in context	10-13%
Identify the Narrator or Speaker	Identify the narrator's or speaker's tone, mood, point of view, attitude, voice, etc.	10-13%
Analyzing Character	Identify the characteristics of a character	6-10%
Analyzing Dialogue	Identify tone of the dialogue, meaning, or function	6-10%

To ensure a balanced evaluation of students' thinking skills, the EST II Literature Test distributes its questions across three cognitive levels (Table 31). This structure measures students' ability to recall and understand literary concepts, apply analytical strategies to interpret texts, and engage in higher-order reasoning to evaluate and synthesize ideas. It provides a comprehensive picture of students' readiness for advanced study in literature.

Table 31: Distribution of Cognitive Levels in EST II HS English Literature Tests

Cognitive Level	Description	Weight
Knowledge	This level requires the use of simple skills or abilities. This may include a surface-level understanding of prose, poetry, and drama.	25-30%
Application	This level requires the engagement of mental processing beyond simple recall. It requires both comprehension and subsequent processing of portions of text. Tasks may involve analysis, evaluation, inference, interpretation, and organization.	30-35%
Reasoning	This level requires reasoning, planning, identifying literary and rhetorical devices, making inferences across an entire passage, applying and/or explaining prior knowledge, generalizing, or connecting ideas. It may also involve analyzing a dialogue, or characters and citing evidence to support an idea.	35-40%

The EST II HS English Literature Subject Test was introduced in 2024 and currently follows its original specifications, with no changes applied. It provides a reliable measure of students' ability to read, interpret, and analyze literary texts, supporting schools and universities in making informed placement and admissions decisions.

EST II HS World History

The EST II HS World History Subject Test is designed to assess students' knowledge of major historical developments, their understanding of key historical concepts, and their ability to interpret and analyze historical information. The test consists of 65 multiple-choice questions administered in 60 minutes. Questions are based on students' historical knowledge, visual sources, or brief excerpts/quotations, rather than full reading passages.

Table 32: Structure of EST II HS World History Test

Number of items	65 multiple-choice items
Duration	60 minutes
Content Coverage	Pre-history to present; cross-chronological themes
Regional Coverage	Europe, Africa, Southwest Asia, South and Southeast Asia, East Asia, the Americas (excluding the U.S.), and Global/Comparative

Genre of Questions	Quote-based, LEAST/NOT/EXCEPT, Roman numeral, time-sequence, graphic-related, fact-based questions
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The test includes a variety of question genres to assess students' factual knowledge, chronological understanding, and ability to interpret historical visuals and data (Table 33).

Table 33: Genre of Questions in EST II HS World History Test

Genre	Description
Quote questions (10 questions on average)	Students are given a quote or excerpt and asked to identify the speaker, time period, or general philosophy of the writer/speaker.
LEAST/EXCEPT/NOT Questions (25 questions on average)	Based on True/False logic, these questions test students' factual knowledge.
Roman Numeral Questions	Students choose answers from a numbered list.
Time-sequence Questions	This question is part of the Roman numeral subsection designed to assess students' ability to place events in chronological order.
Graphic-related Questions (10 questions on average)	These questions are related to pictures, charts, maps, or political cartoons. Students are asked to identify who/what is represented, regions, or places.
Fact-based questions	Students are asked about general historical facts pertaining to a specific time period, movement, or person.

The EST II HS World History Subject Test emphasizes students' ability to recall key historical knowledge, understand cause-and-effect relationships, and analyze patterns and connections across time and regions. Additionally, it assesses their skills in interpreting historical data from maps, charts, graphs, and visual sources, as well as their ability to place events in chronological order and identify major developments, movements, and figures.

By the end of the test, students are expected to demonstrate the ability to:

- Recall key historical events, figures, terms, and concepts from different world regions and time periods.
- Understand and explain cause-and-effect relationships and their impact on historical developments.
- Place major events, movements, and civilizations in chronological order.
- Analyze and interpret data from historical maps, charts, graphs, images, and political cartoons.
- Identify the origin, context, or philosophy behind historical quotes or excerpts.
- Recognize and compare major political, social, cultural, and economic systems across regions and eras.
- Trace patterns of change, continuity, and interaction among societies over time.
- Evaluate the role of geography, resources, and trade in shaping historical developments.
- Apply historical reasoning to draw connections between past events and global developments.

The EST II World History Test covers a broad span of human history across multiple eras and regions. The content is organized to ensure balanced coverage of major civilizations, global interactions, and historical developments from pre-history to the present (Table 34). This distribution allows the test to assess students' understanding of both specific periods and cross-chronological themes, as well as their ability to make connections between different regions of the world.

Table 34: Eras covered in the EST II HS World History Test

Era	weight
Prehistory and civilization to 500 C.E.	25%
500-1500 C.E.	20%
1500-1900 C.E.	25%
Post 1900 C.E.	20%
Cross-chronological	10%

In addition to covering key historical eras, the test ensures balanced representation of major world regions. This regional distribution assesses students' understanding of global patterns and interactions, encourages them to connect developments across different parts of the world, and helps them recognize the diverse contributions of various civilizations (Table 35).

Table 35: Regions covered in the EST II HS World History Test

Regions	weight
Europe	25%
Africa	10%
Southwest Asia	10%
South and Southeast Asia	10%
East Asia	10%
The Americas (excluding the U.S.)	10%
Global and Comparative	25%

To provide a balanced evaluation of students' historical thinking skills, the EST II HS World History Test distributes its questions across three cognitive levels. This structure measures students' ability to recall key facts and concepts, apply historical knowledge to interpret events and relationships, and use reasoning skills to analyze data, identify patterns, and draw informed conclusions about global developments (Table 36).

Table 36: Distribution of Cognitive Levels in EST II HS English Literature Tests

Cognitive Level	Description	Weight
Knowledge	This level requires the use of basic skills or abilities, including familiarity with terminology, cause-and-effect relationships, geography, and other information necessary for understanding major historical developments. It also includes an understanding of concepts essential to historical analysis.	60%
Application	This level requires mental processing that goes beyond the simple recall or reproduction of information.	30%
Reasoning	This level requires interpretation and analysis. Tasks may involve using historical knowledge to interpret and analyze data presented in maps, graphs, charts, or diagrams.	10%

The EST II World History Subject Test was introduced in 2024 and currently follows its original specifications, with no changes applied. It provides a reliable measure of students' knowledge of major historical developments and their ability to apply historical thinking skills to analyze global events and patterns.

Conclusion

The EST High School Assessment Suite has been developed to offer a comprehensive and reliable measure of students' academic readiness and subject-specific proficiency. It is built on the belief that effective assessment should evaluate not only what students know, but also how well they can apply, analyze, and extend their learning in preparation for university-level study.

EST I HS focuses on assessing the core skills essential for success in higher education—including literacy, numeracy, analytical reasoning, and problem-solving. The redesigned 2026 specifications integrate reading, writing, and language usage into a single literacy test, and merge the former two-part math structure into one streamlined test paper. These changes are informed by international benchmarks, student performance data analysis, and feedback from schools. The goal is to reduce test fatigue, provide more time per question, and allow students to demonstrate deeper comprehension, reasoning, and accuracy.

EST II HS complements this by measuring subject-specific knowledge and higher-order thinking skills across eight disciplines: Math Level 1, Math Level 2, Biology, Chemistry, Physics, Economics, English Literature, and World History. The 2026 specifications introduced significant updates to the five science and math subjects—removing low-priority content, restructuring test formats, and improving cognitive balance—while the three humanities and social science subjects introduced in 2024 continue to follow their original specifications. Together, these tests give students the opportunity to demonstrate their strengths in areas that align with their intended university majors, spanning STEM, health sciences, business, and the humanities.

By combining core skill assessments with subject-based tests, the EST suite offers a coherent, internationally benchmarked framework for measuring academic preparedness. It provides schools, educators, and universities with clear insights into students' abilities, supporting informed placement, admissions, and curriculum planning decisions. The ongoing refinement of the EST reflects Academic Assessment Ltd.'s commitment to academic excellence, fairness, and continuous improvement, ensuring that students are assessed through valid, reliable, and future-ready measures that support their progression from school to higher education.